

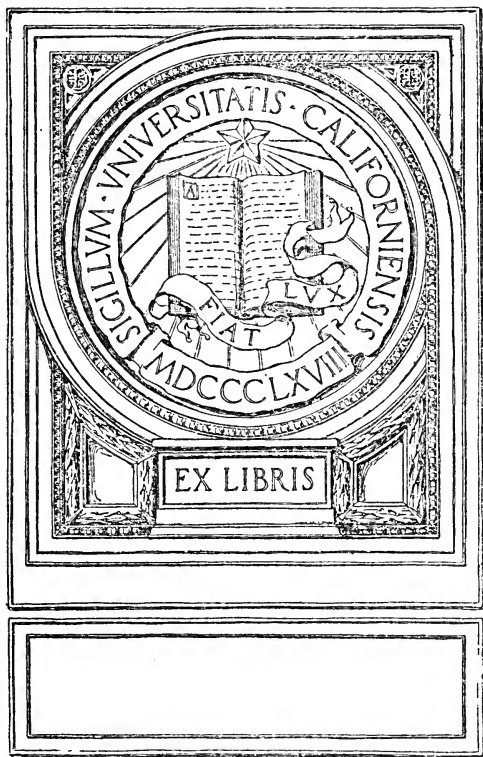
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A
GUIDE
TO THE
TEACHING
OF
SPELLING

Pryor and
Pittman





A GUIDE TO THE
TEACHING OF SPELLING



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A GUIDE

TO THE

TEACHING OF SPELLING

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PREFACE

THE primary purpose of this book is to help teachers to improve the quality of their teaching of spelling. While it has been written with the problems of the inexperienced teacher foremost in mind, it is believed that it may be of substantial value to experienced teachers as well. Simplicity of expression and natural sequence in arrangement are very important to busy, practical teachers. An earnest effort has been made throughout the book to keep these factors in mind.

The authors wish to express their appreciation to the following persons for criticism and suggestion: Frederick G. Bonser, Teachers College, Columbia University; J. T. Calhoun, State Rural Schools, Jackson, Mississippi; J. A. Churchill, Superintendent of Public Instruction, Salem, Oregon; Frank L. Clapp, University of Wisconsin; W. S. Dakin, State Inspector of Schools, Hartford, Connecticut; E. S. Evenden, Teachers College, Columbia University; Roland Fennimore, Superintendent of Schools, Bradley Beach, New Jersey; John M. Foote, Department of Education, Baton Rouge, Louisiana; Ethel Galleher, Western State Normal School, Kalamazoo, Michigan; J. R. Grant, State Supervisor of Rural Schools, Little Rock, Arkansas; C. C. Henson, Isidore Newman Manual Training School, New Orleans, Louisiana; S. A. Leonard, Lincoln School, New York City; W. A. McCall,

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INTRODUCTORY CHAPTER

Is our spelling poor? Yes, it is poor but it is not so bad as is ordinarily supposed. We use a small number of words in our writing. Not more than one thousand are necessary to satisfy most of our daily needs. One hundred of these common words are misspelled many more times, as a group, than the other nine hundred; so frequently, in fact, that Professor Jones has properly called them the "One Hundred Spelling Demons."

It has been supposed by some persons that our forefathers spelled better than we do. This belief arose from the fact that a great deal was said about the good spellers who won in the old spelling bees and very little about the "ninety and nine" who were "spelled down."

In 1906 some old spelling examination papers which had been written in 1846 were discovered in the attic of one of the school buildings in Springfield, Massachusetts. The words were pronounced to the eighth grade children and they did much better than their forefathers had done sixty years before in the same school. This old Springfield list has been pronounced to eighth grade children all over the country, always, so far as the writers know, with the same result: children of the present generation have shown their superiority as spellers over the Springfield children of 1846.

While our shortcomings have been overemphasized,

it is nevertheless true that our spelling is poor. We are poorer spellers than we ought to be because we do not study intelligently. We do not, as we should, keep the law of habit formation clearly in mind in teaching and learning spelling.

A great deal can be done by the teacher to secure better spelling by proper motivation of the work. The words selected should be so closely connected with the real problems of daily life that the child cannot fail to appreciate their usefulness. While the teacher's judgment as to what words should be used is better than the child's, greater enthusiasm and interest may be aroused by having the pupils help occasionally in making the spelling lists.

Finally, if we are to secure permanent improvement, we must seek to develop in each child a spelling consciousness or ability to detect errors, and a spelling conscience which will not permit him to pass by a misspelled word.

Very few teachers have a good classroom technique in the teaching of spelling. As a rule, the pupils are told to "study the next lesson" and, too often, no attempt is made to point out, or to have the pupils point out, the pitfalls to be avoided. It has been found that the best results are secured when the teacher studies and plans the spelling lesson carefully, in advance, and leads the pupils to see the difficulties in each word. As a result of various experiments that have been made, the modern teacher is able to make spelling assignments more wisely than was the teacher of even a decade ago. In a later chapter, an effort will be made to explain some of the principles of good classroom procedure.

During recent years, so many experiments have been made, so many spelling texts and lists have been prepared, and so much of a general nature has been written on the subject of spelling, that the inexperienced teacher may well be confused.

The authors have attempted to evaluate this material and to present, particularly to the inexperienced teacher: first, a simple interpretation of the best known experiments; second, a discussion of the fundamental psychological principles involved in the teaching of spelling; third, a review of the best methods; fourth, an appraisement of the various types of spelling texts that are now being used; fifth, a discussion of the various lists which have been made with suggestions as to the making of others; sixth, a classification and discussion of classroom devices; and last, the answers to a few of the questions often asked by teachers.

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PART I

FUNDAMENTAL PRINCIPLES

CHAPTER I

LEARNING THROUGH EXPERIMENT

THERE are in general two ways of acquiring better methods of working — by repeated trial and error and by conscious, purposeful experiment. Both have been in use for ages, but the former has been the more common. The trial and error method has proved to be such a wasteful one that it has inspired the saying, “Experience keeps a dear school.” Scientific experiment has been used by fewer persons because it requires a clearer consciousness of a specific goal and greater patience, persistence, originality, and initiative on the part of the user; but it is becoming more and more common as a method of learning the right way of doing things, and the trial and error method — the method of learning through experience alone — is

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falling more and more into disrepute among thinking people.

Teachers are a conservative folk and have clung to the old ways of doing things longer than doctors, lawyers, business men, and people in many walks of life; they have long learned through repeated trial and error; hence, the experimental method of studying problems of teaching has had a hard time gaining the teachers' favor. At last, however, education has come to be recognized as a science and even the youngest teacher sees the benefits to be gained through careful testing of methods and of results.

The first experiments in the field of spelling were crude and imperfect in many ways, but they should be mentioned here because they aroused interest and paved the way for the many helpful experiments that have been performed in more recent years. Let us consider a few of the early efforts along this line.

EXPERIMENTS

The first person to do any experimental work worthy of notice in connection with spelling was a physician, Dr. J. M. Rice. He became interested in education because of his work with children. Finally, he became convinced that schoolmen did not know a great deal about their own work, that they were really proceeding by the use of the trial and error method, and that they were not in the

habit of testing their results. He decided to make an experiment, and with that experiment a new era in the teaching of spelling began.

Dr. Rice's experiment was a test in spelling. In 1894, he made out a list of words and had them pronounced to school children all over the country to find out how well they could spell. This first test consisted of words which were pronounced in lists. Dr. Rice was not very well satisfied with the way in which the teachers conducted the tests, so he decided to direct more specifically the giving of the second test. This time he had the teachers read sentences containing the words to be spelled. Finally, he tested the pupils' ability by having them write compositions in which the misspelled words were counted. He found that the pupils did better in the second test than in the first and in the third than in the second. It was not surprising that the best results were obtained in the last test because the children selected their own words and, naturally, they chose only those which they were sure that they could spell.

What Dr.
Rice Con-
cluded

These tests were not conducted very carefully, but they did teach teachers and students of education a great deal. Dr. Rice arrived at some very startling conclusions. He claimed that the kind of school a pupil attended had little to do with his spelling ability, that the pupils in progressive schools did no better, on the whole, than pupils in unprogressive schools.

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He claimed that the child who came from a good home did no better, on the average, than the child from a poor home, and that the foreign-born child spelled just as well as the native-born American. He said that pupils learned no better under one method of instruction than under any other, and that pupils who spent only fifteen minutes a day on spelling did just as well as those who spent half an hour or more. He found that the older pupils did better than the younger ones. The personality of the teacher seemed to him to play an important part in the pupils' progress in spelling; that is, good, strong teachers got better results, on the whole, than those with weak personalities.

Dr. Rice's findings met with a storm of protest, opposition, and abuse on the part of school people, but he did a great deal to make them think, and from that time on long-established custom counted less and judicious experiment more in education.

Let us consider Dr. Rice's conclusions from our point of view. We know, now, that pupils in progressive schools spell better than those in unprogressive schools. We know that the personality of the teacher in and of itself cannot produce better results in spelling, except in so far as it makes for greater satisfaction and makes the pupil work harder. Pupils do as well in short periods, of fifteen minutes for example, as in longer periods. The method of teaching does have a good deal to do with

the results. There is a difference of opinion as to the effect of age on spelling ability, but the general opinion is that accelerated pupils, or those ahead of their grade, do best.

The next experimenter in spelling was Assistant Superintendent O. P. Cornman of the Philadelphia public schools. He was of the opinion that **Incidental Spelling** the incidental method of teaching spelling, *i.e.*, teaching it in connection with other subjects, secured just as good results as a regular spelling drill. He compared the records of many Philadelphia schools which had used the incidental with those which had used the drill method. He also compared the records in schools which had used both methods. The records for fifty schools for a period of three years showed very little advantage for the drill method. Cornman concluded that the time devoted to drill did not have any great effect on the results, that the incidental method was a time saver, and that the average teacher could get no better results than those shown at Philadelphia at that time.

There are serious objections to Cornman's conclusions. To begin with, the incidental method is not a time saver, because the time is really taken from those other subjects with which spelling is taught. The weak pupil suffers more than the strong one when the incidental method is used because of his lack of initiative and independence. We

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know now that there is a good deal of difference in the kind of drill and that good drill does get good results. The chances are that the drill method used in Philadelphia at that time was not good. A later experiment shows the results to be obtained by careful drill.

In 1910, Mr. J. E. W. Wallin made a study of the records of three schools in Cleveland, Ohio, where a good drill method was in use. Spelling had been as poor in Cleveland as in other cities. Finally, an effort at reform was made because the public demanded it; and a special drill method was worked out. The plan was to emphasize two words in each lesson. These words were reviewed the following day and again a week later. After eighty new words had been taught, they were reviewed again for a test. At the end of the year, all new words were reviewed for the annual spelling contest. The next year they were taken up in connection with new words. Altogether, each word was presented five times in two years. This method has made Cleveland famous for the spelling ability of her children.

Mr. Wallin wished to get light on five questions: (1) "What has the age of the pupil to do with spelling ability?" (2) "What is the spelling ability of boys as compared with girls?" (3) "Do pupils learn spelling more easily in one grade than in another?" (4) "Do pupils spell as well when they

write words in sentences as they do when the words are pronounced separately?" (5) "How does the incidental method of spelling compare in efficiency with the drill method?"

He concluded that "on time" pupils spelled better than those who were behind or ahead of their grades; that is, normal fifth grade or fourth grade or sixth grade pupils spelled better, as a rule, than those who were retarded or accelerated. Girls spelled better than boys in most cases. Words were spelled almost as well when they were written in sentences as when they were written by themselves. Wallin's greatest discovery was that good drill made for better spelling than the incidental method of teaching.

This experiment was conducted much more carefully than either Rice's or Cornman's and is much more trustworthy. It is generally agreed, now, that the drill method is better because it requires closer attention to the work being done. Teaching spelling in connection with reading, language, and other subjects scatters the attention and cannot fix very good spelling habits.

The drill and incidental methods of teaching are general. Many experiments have been performed to test specific methods of teaching. For **Value of** example, homonyms, such as *to*, *too*, and **Grouping** *two*; *beat* and *beet*, *choir* and *quire*, present a puzzling problem. Should they be taught together or

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separately? Principal H. C. Pearson of the Horace Mann School in New York City decided that he would find out. In 1911 he made some careful tests and found that all grades except the fifth in his school did better when the words were taught together. Another experiment, in one of the Montclair, New Jersey, schools, showed that all except the fifth and seventh grades did better when the homonyms were taught together. More proof is needed before the question can be decided.

The method of teaching homonyms separately seems to be most generally accepted among teachers. If confusion results, as in the case of *bare* and *bear*, or other homonyms, Bagley suggests that, in order to break up the bad habits, it is "necessary to bring the mechanical process into the focus of consciousness and then replace it with another process."

Studley and Ware, authors of "Common Essentials in Spelling," are of the opinion that homonyms should be taught separately. Thorndike, one of the greatest authorities on matters of this sort, is not sure whether homonyms should be taught together or separately.

Some authors of spelling books group words. Grouping homonyms seems logical from the results of the experiments just described, but should we use other schemes for grouping? For example, should words like *linear*, *lineage*, *lineal*, *lineament* be grouped together in a textbook? C. H. Wagner

tried out this plan and found that pupils improved much more rapidly when the spelling words were grouped than when no such device was used. Another scheme is to group words around some common interest; for example, names of flowers, of rivers, of mountains, of agricultural products, or of birds. This seems to produce better results than jumbling unrelated words together in the same list. The first grouping scheme must be helpful because there are more repetitions of the same element than would be the case if the words were in separate lessons, and this fixes the correct spelling habit. When the second scheme of grouping is used, the pupil's interest is aroused and he gives closer attention. We know that this produces better results.

The kind of method to be used depends on a great many different things. One cannot teach primary pupils in the same way that intermediate or grammar grade pupils are taught. Boys cannot always be taught in the same way as girls. Johnnie cannot always be taught in the same way as Henry; and, in fact, Johnnie himself cannot always be taught in the same way to secure the best results. The teacher must study her pupils and decide for herself what method is needed to fit each case. More will be said about methods later on, however, and the subject need only be mentioned here.

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Another question which often troubles the teacher is this: Should words be spelled orally or written?

Written vs. Writing the word "in the air" with the
Oral finger cannot have much value because
Spelling the pupil cannot see what he has done.

According to Horn, going through the form of writing on the top of the desk or on paper has been found to be better. The best plan of all is to have the pupils actually write. Young pupils have considerable difficulty with the writing itself, so it is better for them to use the oral method until they have learned to write without having to worry about the form of the letters. No doubt some pupils learn best by writing, others by spelling orally, and others by seeing words written. Just which way is best must be worked out for each pupil. Since we spell words more frequently when we are writing than at any other time, it is a good plan to have all pupils begin writing as early as possible.

How shall the words be presented? Dr. J. W. Baird of Clark University performed some experiments to determine the best way to present spelling words. It was found that when words were only pronounced, 6.48 per cent were misspelled; when heard and spelled aloud by the pupil, 4.66 per cent were misspelled; when they had simply been shown to the pupil, 2.60 per cent were misspelled; when they had been seen and spelled aloud by the pupil, 2.27 per cent were misspelled; and when they had

LEARNING THROUGH EXPERIMENT 11

been seen, used, spelled, and written by the pupil, 1.00 per cent were misspelled. This shows that the greater the number of associations formed, the better the pupil learns. In cases where the word has been seen, used, spelled, and written, the word and its sound, its meaning, its visual image, and the muscular sensation of writing it, are all connected or associated. As has been said, some pupils learn more readily by one method than another. It is well to help the individual to find just which method is best for him to use and to let him use it. The satisfaction which results makes the learning easier. The teacher should encourage learning through the different senses.

No doubt, the teacher often wonders how she should emphasize difficult letters or parts so as to make sure that the pupils will not mis-
spell them. How should the first "a" in *separate* be impressed on the pupil's mind? Different devices have been suggested, such as writing it in red or some other color, inserting a capital "A," writing the letter more heavily than the others, or doing something else to make it stand out clearly. W. T. Taylor thought of writing a spelling book with all the "crucial letters," as he called them, printed in red. He tried out his plan by having one group of pupils study lists of words printed in ordinary black type, and another group study the same lists with troublesome letters

Special
Emphasis
on Difficult
Part of
Word

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printed in red, nothing being said about the purpose of the red letters. The pupils who used the black lists did better than the others. Such a device is not particularly valuable because we cannot pick out the letter or group of letters which cause difficulty to all pupils. The first "a" in separate may cause difficulty to one pupil while another will have no difficulty with "a" and make an error in another part of the word.

Do rules help in the teaching or learning of spelling? Rules are nearly always too difficult for elementary pupils to apply because they cover relatively few words and there are many exceptions. Naturally, they do help if the pupil knows the rule and remembers to which words it applies. A common example is the rule for the use of *ie* and *ei*; "*i* before *e*, except after *c*, or when sounded like *a* as in neighbor and weigh." There are so many things to think of in the application of this rule and it is so easy to forget, that it seems more economical to spend the time needed to fix the habit of using the rule in the learning of spelling words. Cook and O'Shea, Suzzallo, and other authorities agree on this point.

Will the adoption of simplified spelling help? During the past decade in particular, there has been a great increase in the interest in simplified spelling. There has been a great deal of controversy regarding the question

as to whether simplified spelling will really help much in doing away with our spelling difficulties. Some authorities say that it will, but they are contradicted by others whose opinions have just as much weight. Miss Shaw, who has made a study of the problem, says that "simplified spelling has, for the present generation at least, greatly increased bad spelling." It has been argued by some persons that simplified spelling would make the learning of our language easier for foreigners because so many of them, especially the southern Europeans, have a phonetic language. A distinguished American scholar of foreign birth, speaking for foreigners in general, has advanced the opinion that an extensive simplification of our spelling, while lightening the burden of spelling and pronunciation, might so obscure the historic roots of many words as greatly to increase the student's difficulty in gaining their meaning. Our spelling has never been consistent, but it has been improving for many years. Such authorities as Benjamin Ide Wheeler and Professor Brander Matthews believe that, as a rule, our peculiarly spelled words should be spelled more simply than they are. Most teachers agree with them.

Let us consider a concrete case. The simplified form of *through* is "*thru*." What would be the effect of introducing the new form unless it were used in all books, newspapers, and other periodicals?

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There would be a great confusion because school children who are learning to spell would be meeting both forms. They would not be sure which one to use and would use them interchangeably or, perhaps, use even a "cross" between the two. We must remember that *through* is not the only word for which a simplified form is suggested; there are hundreds of others and the confusion would be multiplied by the number of simplified spellings introduced. Simplification is desirable, but why should it not be introduced gradually as it has been in the past instead of by a sudden general reform? If a few simplified forms were introduced at a time, teachers would be able to fix the right spelling habits and to watch for evidence of backsliding.

So far the evidence for or against simplified spelling has been on the side of experience. Little experimental work of a serious nature has been done. We must have experiments to test the assertions which we have been making so strenuously before we can go ahead safely with our simplification of words.

Does it help to syllabify words which the pupil is to learn to spell?

A good many spelling books make use of this device by printing the words in syllables, thus appealing to the children who get their impressions mainly through the eye. Several persons have tried to find out by experiment just how helpful this method is. Miss Abbott

Value of
Syllabi-
cation

found it helpful to adults. Professor Heilman of the Colorado State Teachers' College tried the experiment of having one division each of the fourth, fifth, and seventh grades study syllabified words while the other division studied unsyllabified words. He gave three tests to discover the progress of the children and found that syllabication helped the fourth graders most and the seventh grade pupils least. An experiment by Professor Horn of the University of Iowa did not show any advantage for this kind of syllabifying.

Clear pronunciation, which means enunciating each syllable clearly and correctly, helps toward correct spelling. This is especially true of words in which the pronunciation is a key. It hardly seems possible that the pronunciation could be of much assistance in the spelling of such words as *thorough*, *rough*, *cough*, *slough*, and the like. However, in many words the spelling is made easier by the pronunciation. These are the phonetic words which are spelled just as they sound and words with few or no silent letters. The spelling of words containing the syllables *or*, *er*, both pronounced alike, and words containing the syllables *e*, *ea*, *ei*, *eo*, *ay*, *ai*, and *a*, all pronounced like *ē*, is not helped much by pronunciation. The sound *sh*, in the words *sure*, *ship*, *conscience*, *suspicion*, *ocean*, *nation*, *anxious*, is not differentiated as to its spelling by the most careful pronunciation. But careless pronunciation never helped any one.

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A helpful way in which to make use of syllabication is to have the words separated into syllables after they are pronounced by the pupil.

Should spelling be studied in the classroom or outside?

It was the custom for a long time for the teacher to make the assignment after the lesson for the day was recited and to leave the pupils to prepare their lesson by themselves as well as they could, either at home or in school.

Super-	
vised	
vs.	
Unsuper-	
vised	
Study	

A good many teachers still do this in spite of the fact that it is a wasteful method. The teacher always knows more about the difficulties to be overcome in a spelling lesson than the pupils do. She is not doing her part if she does not make a careful assignment of the lesson, showing the pupils just what they should look out for and telling them how to overcome the difficulties. A good assignment leaves the child well started in the preparation of his lesson.

Mr. Pearson of the Horace Mann School made an experiment to find out which was the better way to study. Each grade was divided into two classes. The pupils in one class studied by themselves in school or at home. Those in the other class studied in school under the teacher's supervision. In eight cases out of ten, the supervised study proved the more helpful.

No doubt the reader is wondering by this time

what is the best method to use. There are many methods which have been tried out more or less thoroughly but we cannot say that there is a *method*. Professor Charters says that the function of spelling teaching is to help the child to form the habit of writing the letters in their correct order in words. There is no one who would not agree with this proposition. Since it is true, we must use all methods to this end. While it is necessary to adapt our methods to the age of the child, to the kind of words which are being taught, to the same pupil at different times, and to different individuals, we must keep in mind, all the time, the importance of writing the letters in the right order in any word.

Value of
Emphasizing the
Order of
the Letters

One of the writers of this text made an experiment several years ago to determine the effect of having pupils notice carefully the exact order of the letters in each of the words to be learned. Two fifth grades in Boulder, Colorado, were selected, with the assistance of the Superintendent, for the purpose of the experiment. The teachers were of nearly equal ability so far as the Superintendent was able to judge. The children in the two rooms were of about the same type, coming from good homes in the most desirable sections of the city. They were of about the same general ability so far as scholarship is concerned. It was found that one grade had an average in scholarship for the first quarter

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of 82.52 per cent and the other an average of 82.13 per cent. Neither children nor teachers knew that an experiment was being performed until it was almost completed, when one of the teachers learned what was being done and was told the purpose of the experiment.

The first class mentioned above will be called "5A" and the second "5B." Both classes were taught the same words. "5A" was taught in the usual manner, "5B" was taught to notice very carefully the order of the letters in the different words. The children in "5B" were asked to write their words, always, during the daily spelling lesson. The words were always pronounced clearly, and written on the board in syllables by the teacher. She always spelled by syllables as she wrote. During the assignments emphasis was placed on the following points:

(1) Silent letters, double letters, vowels having the same sound, as in *or* and *er*.

(2) Common parts in different words.

(3) Difficult combinations of letters.

(4) Difference in pronunciation of such prefixes as *il*, *el*, *al*, *ol*, *em* and *im*, *en* and *in*.

(5) Trying to recall how words were spelled after they had been erased.

(6) Each pupil was to study in whatever way seemed best to him; that is, he learned by looking at the words on the board, by spelling them silently, by writing them, or by a combination of these methods.

The teacher was cautioned against :

- (1) Mispronouncing a word to give the pupil an idea as to how it should be spelled.
- (2) Using rules.
- (3) Mentioning possible mistakes such as the use of *e* in the word separate.
- (4) Running over time.
- (5) Making home assignments.

A list of words from those to be studied was pronounced to both groups of children before the experiment began. The children in "5A" averaged 50.55 per cent and those in "5B" averaged 48.58 per cent. The advantage to begin with was with "5A." At the end of six weeks another test was given. The same words were used because the author wished to find *just how much the children had improved*. This time "5A" averaged 83.39 per cent and "5B" averaged 89.14 per cent. "5A" had gained 32.84 per cent while "5B" had gained 40.56 per cent or 7.72 per cent more. This seemed fairly good proof that adhering to a good method had been beneficial to "5B." Another fact which was noticed was that there was less variation among the pupils in "5B" after the six weeks' work than there was among the pupils of "5A." The work in "5B" had been of more benefit to the poorest pupils than had that in "5A."

During this test a careful record of attendance was kept for the two groups. Those in "5B"

averaged 6.5 days' absence, while those in "5A" averaged only 2.7 days' absence. This was another evidence of the value of the method since it helped the pupils who had been absent a greater length of time to make a better record.

SUMMARY

The two common ways of learning better methods have been by repeated trial and error and by scientific experiment. On account of their conservatism, teachers have clung to the former method longer than persons in other occupations, but the experimental method is gaining ground.

The first experiments in education were crude, and spelling was no exception to the rule. Dr. Rice did considerable experimenting in spelling and discovered some startling facts. He was criticized and abused by conservative educators but his work resulted in an interest in the experimental method.

Cornman believed that as good results could be obtained by teaching spelling in connection with other subjects, incidentally, as by drill. His experience showed only a slight advantage for the drill method.

Mr. Wallin, who made a much more careful study of the drill method in use in the Cleveland, Ohio, schools, found it much more effective than the incidental method. He found, also, that normal pupils spell better than those who are accelerated or retarded; that girls, as a rule, spell better than boys; that words are spelled almost as well when they are written in sentences as when written separately.

A good many experiments have been made to solve special problems in the teaching of spelling. Pearson and others found that it was a little better to teach

homonyms together than to teach them separately. Other authorities differ in opinion. We need more evidence before we can say just which method should be used.

Wagner found that grouping words containing similar elements resulted in better spelling.

Young pupils spell better, orally, than when they write, because in writing they have to think about the formation of the letters. It is wise, however, to introduce written spelling at an early age because it is more common than oral spelling.

Taylor found that having difficult letters of words printed in colors did not help pupils to spell these words correctly. Such a device has little value, because it is impossible to pick out the parts of words which cause difficulty to all pupils.

Authorities agree that it is better to spend the time in fixing the correct spelling habit than in trying to teach the pupil to spell words by rule.

There is considerable difference of opinion, but no real experimental proof, regarding the value of simplified spelling. There is no good reason why our spelling should not be much better without simplification. Simplification might result in confusion unless introduced gradually.

Syllabication of words in script or print makes learning easier, as a rule. Pronouncing by syllables is helpful to the pupil.

It has been shown by experiment that study supervised by the teacher is more helpful than unsupervised study.

We cannot say that there is *a method* of teaching spelling. There are many useful methods. One of the authors has demonstrated, experimentally, that emphasizing the correct order of letters in words results in better spelling. All methods must be adapted to this end.

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QUESTIONS AND EXERCISES

1. Name five persons who have made investigations or conducted experiments for the purpose of determining better methods of teaching spelling. What was the distinct contribution made by each?

2. Which experiments discussed in this chapter might you helpfully repeat in your school?

3. What are the benefits which you would derive from personally conducting experiments to help find out good methods of teaching spelling?

4. Plan with three of your friends who teach the same grade that you do, to conduct a spelling investigation for a month and then compare your results with theirs.

5. How can you test your pupils to see to what extent the difficulties of penmanship lessen their ability in spelling?

CHAPTER II

THE PSYCHOLOGY OF SPELLING

It has been said that the psychologist is a person who tells what everyone knows in language which nobody understands. This must be the reason why some teachers become alarmed when they read the word "psychology" in a title.

The authors realize that they run a degree of risk in introducing a chapter on psychology, but it is necessary that every teacher should have in mind some of the fundamental psychological principles if she is to make a success of teaching. An attempt will be made to use only such psychological terms and illustrations as any studious teacher can grasp.

Professor Thorndike of Columbia University says "Learning is connecting, and man is the great learner primarily because he forms so many connections." These connections or bonds of which he speaks are made in the nervous system. They are formed whenever a child or an adult or any animal which has a nervous system learns something. The connection may be between some situation out-

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side the individual such as $2 \times 2 = ?$ on the blackboard and the response 4 in the individual's mind; it may be between the thought of the word *separate* which one wishes to spell and the correct writing of the word, or simply the thought of the correct spelling. There are many different kinds of connections between situations and responses, both inside and outside the classroom. A boy sees a baseball and thinks of the game, or he hears the school bell and thinks, "Well, it is time to stop playing marbles and learn that pesky geography lesson." The girl sees the dinner table after the family meal and the sight suggests the distasteful task of dishwashing, or she sees a display of hair ribbons and, forthwith, she thinks of the beautiful hair ribbon she received as a present on her last birthday. In these cases, seeing the baseball, hearing the school bell, seeing the dishes, or the display of ribbon, might have led to different responses. This is too frequently the case in spelling. Johnnie hears the word *separate* pronounced and he may write it *seperate*, *seprate*, *seprat*, *sepert*, or in any of a dozen different ways. In each case he has the wrong response to the situation, although the situation has not changed.

This is where the work of the teacher comes in; it is her duty to see that Johnnie makes the correct response every time, and that, finally, this response becomes automatic. She should make sure that

no pupil has too much to learn or she will defeat the purpose of the spelling lesson. She should motivate the work, or make it so interesting that the child will want to learn, and she should make such clear assignments and direct the study of them in such a way that improvement will be easy.

Professor Bagley in his "Classroom Management" states a very important law of psychology in a very concise way. This is the law of habit formation: "Focalization of consciousness upon the process to be automatized, plus attentive repetition of this process, permitting no exceptions until automatism results." This law is so important in the formation of correct habits of any kind that its application needs to be made perfectly clear. Let us see how it applies to spelling. Suppose we have some particularly difficult word to teach. To begin with, the pupils must give the best attention. All disturbing influences must be shut out and the word to be learned must be in the center of the field of attention. The teacher picks out the difficult parts, one at a time, and emphasizes the correct forms. This is "focalization of consciousness on the process to be automatized." The class or the individual pupil is called upon to repeat, attentively, the correct form. This fulfills the second part of the law. There is a little danger that this part of the process may be continued too long; that is, that the pupil may waste his time in over-

**The Law
of Habit
Formation**

learning. Professor Thorndike thinks that this result need not be feared. We must be sure, however, that the word is repeated often enough to insure correct spelling at all times; and the task does not end here. Teachers must be constantly on the alert to guard against mistakes in order that they may be prevented or corrected. "Permitting no exceptions to occur" is just as important as making a good start. If incorrect forms are permitted to creep in after the word has been correctly learned, bad spelling habits compete with the correct one and the teacher cannot be sure which habit will "come out on top."

Let us illustrate the application of the law of habit formation in another way. Suppose the teacher is teaching the word *February*. This word is often misspelled because it is mispronounced, *Febuary*. The teacher should pronounce the word carefully, "Feb'-ru-a-ry," so that every syllable receives its value. If this is done, the word is half learned because every letter except, perhaps, *y*, stands out so clearly that the child ought to be able to spell this word correctly. Some child who is sure of the spelling might be called upon to spell the word at this time. This would help the child who learns best by hearing. Then the teacher might write or have some child write the word on the board, pronouncing and spelling it by syllables, thus helping the visualizers. Children who learn best

by spelling the word to themselves, or by writing, should be encouraged to use either of these methods of learning. The word is presented to the children in several different ways; and some will make use of each way of learning. It is good psychology to proceed in this manner because one learns best when the material to be learned is presented through different senses. All this explanation has to do with focalization of consciousness on the process, in this case the forming of connections or bonds between the successive letters in such a way as to make sure that they will always be written in the right order whenever the pupil has occasion to use the word. Since the second syllable, *ru*, is so often misspelled, the teacher should make sure that the pupils focalize their attention on it.

Next, a good deal of attentive repetition is necessary if the children are to learn the word in such a way as to be able to write it automatically; that is, without having to stop to think about the spelling. Attentive repetition means that the pupil must spell the word carefully, making sure that all the letters are visualized, spoken, or written in the correct order. The better the child succeeds in shutting out all disturbing factors, the more quickly he learns. There should be enough repetition to fix the correct spelling. The child should be able to close his book and recall the word accurately. After the word has been learned, the teacher should

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make sure that it is reviewed at intervals in order to be certain that the correct spelling is fixed. The length of the period between reviews may be made longer and longer, and, finally, the word may be considered learned.

The third part of the law of habit formation emphasizes "permitting no exceptions to occur" until the process has become automatic. This means that the teacher must be continually on the alert to see that the pupil always spells the word as it should be spelled. It means, too, that the pupil must be on the alert, not only while the word is

being learned, but also after it has been
Interest laid aside as learned. It should be repeated, in this connection, that all pupils will not misspell words in exactly the same way. The teacher should specialize on the mistakes which occur, "making repairs where needed," as Thorndike says.

In discussing attention and habit formation, we must not forget interest. Interest plays a big part in one's ability to learn. We learn most readily the lessons in which we are most interested. We do our best work in the subject in which we have the greatest interest, whether that subject be spelling, arithmetic, grammar, or something else. In some cases the material which one is studying may be unattractive, and uninteresting. After a time interest may develop, largely perhaps because of satisfaction

in having accomplished something at a distasteful task. The teacher can do a great deal in arousing interest in spelling or any other subject.

The "big word" to be remembered in this connection is "motivation," which is simply another word for interest. By motivation we mean "That attack upon school work Motivation which seeks to make its tasks significant and purposeful for the child, by relating them to his childish experiences, questions, problems, and desires."¹ As applied to spelling, motivation means to make spelling appeal to the child's practical nature, to make him see that the subject has a value in everyday life. This may be done by having the pupil make up word lists, a subject which will be discussed later on, or by showing him that by misspelling words in his letters he runs the risk of being misunderstood. The child's interest may be aroused by asking him to keep a personal list of the words which he misspells in order to see how rapidly he can reduce the number. Limiting the spelling list is one important means toward motivation. In the past we have been tempted to require the learning of too many words. Some spelling books contained as many as twelve to fifteen thousand words, many of which would never be used during or after school life. The tendency, in recent years, has been to reduce this number to about four thousand or even less. When the child

¹ Wilson, H. B. and G. M., *Motivation of School Work*.

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sees that most of the words in the spelling lesson are those which he uses in his everyday affairs he is more inclined to study them, and when the teacher takes a vital interest in helping each child to overcome his difficulties the interest in spelling becomes greater.

The question may be raised here as to what words should be included in the spelling list for any grade. This will be discussed in the second part of the book.

The question as to how many words should be included in the list for each grade is a problem of psychology. It is generally recognized that young children are not able to learn as many new words each day as are the older children. Most authorities agree on about two new words as the best number for primary children and not more than five new words for grammar grade children.

Another problem to be decided is that of how much time should be devoted to each lesson. It is

generally conceded, now, that not more than fifteen minutes a day should be used for spelling and that this should include both study and recitation. Fifteen minutes may seem like a short time, but it has been shown that schools which devote a longer time to the subject do not secure results which would justify the expenditure of the extra time. The schools of

The Recitation Period, a Study Period

Cleveland, Ohio, the record of which in spelling has been discussed earlier in this book, have used rather less time for the subject of spelling than is used in the schools of other cities.

SUMMARY

It is essential that every teacher should know something about the psychological principles involved in the teaching of spelling.

The fundamental principle is that "learning is connecting" and that the teacher's chief concern is to see that the right connections are always made by the pupil in learning the spelling of words.

Other very important principles to be kept in mind are that the attention of the learner must be focused on the thing to be learned, that repetition must be attentive, and that no exceptions be permitted until correct spelling becomes a habit.

Pupils learn most readily the things in which they are interested. Interest may be stimulated by the satisfaction which comes from the completion of a task. Sometimes it is necessary for the teacher to stimulate interest. This is called motivation. Elimination of all words except those in everyday use, showing the practical value of different words, and emphasis on the solution of individual spelling difficulties are all excellent means of motivation.

Most authorities agree that from two to five spelling words should be taught each day, depending on the age of the pupils.

It is generally conceded that not more than fifteen minutes a day should be spent in the study and recitation of the spelling lesson.

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QUESTIONS AND EXERCISES

1. What are the essential elements of a spelling situation? When is a spelling response a satisfactory response? What is the teacher's part in this connection?

2. Quote from memory Bagley's statement of the law for the formation of a habit. Explain and illustrate each part of the statement.

3. What is the distinction between "motivation" as defined by Wilson and "sugar coating" as you understand that term? Which do you use in teaching spelling? Prove the correctness of your answer by illustrations.

4. How many words do you ask your children to learn daily in each grade? Go over your assignments for the past week and see.

5. Which of the investigations discussed in Chapter I justifies the authors in saying that fifteen minutes daily is sufficient time to devote to the subject of spelling? Give careful attention to this point for a few weeks and see if you agree.

PART II

METHODS, MATERIALS, AND DEVICES USED IN THE TEACHING OF SPELLING

FOREWORD

IN Part I of this book, we have studied the psychological principles underlying the teaching of spelling. We have shown how, through careful experimentation, these principles and their application to spelling were discovered. We have not attempted to give a summary of all the experiments that have been made. To have done so would have made this book more technical and more detailed than the purposes for which it is written would require or permit. We have presented only those experiments which we feel to be typical and pivotal in nature.

From a study of this brief presentation of scientific investigations and from this short statement of the psychological principles which apply to spelling, we trust that the reader will have gained a point of view sufficiently broad to make a further study of this book easy. Not only this, but we hope that the reader will be inspired to further investigation and more extensive reading on this subject. The

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literature dealing with spelling is now becoming not only abundant but scientifically accurate and detailed.

In Part II we shall consider the methods of teaching spelling that are now used, the materials with which spelling is taught, and the classroom devices which teachers have found helpful.

What are these methods? How do they differ?

What are the materials used? What form do they take?

What are the devices which classroom teachers have found helpful?

A careful reading of Part II will reveal the answers to these questions.

CHAPTER I

METHODS OF TEACHING SPELLING

THE DIFFERENT MODES OF PROCEDURE

THERE are at least four different modes of procedure by which spelling is taught, now in use in the United States. These modes of procedure will be spoken of as "methods of teaching spelling" throughout this discussion. They are not distinctly separated, or mutually exclusive, but they are sufficiently distinct and exclusive for us to think of them as different methods.

In this discussion we shall present the mode of procedure, the advantages claimed for it, and the objections urged against it, for each of the four methods discussed.

It must be borne in mind that in all four methods repetition and drill are essential. The names applied to the methods in the following discussion arise, primarily, from the way in which the words are first presented to the pupil.

THE INCIDENTAL METHOD

As suggested in Chapter I, in our discussion of Cornman's experiment, the words which constitute

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the spelling lessons when this method is in use are taken from the subject matter of other classes.

The Sources of the Words for the Spelling The words for the spelling for one day may be taken from the hygiene lesson for that same day. The next day, words from the history lesson may be selected.

Agriculture, arithmetic, and all the other subjects may be used as sources of supply for the spelling. The written composition of the children is one of the most fertile sources from which words for the spelling lesson come.

Were this method strictly applied, there would be no special and conscious attention to spelling as such. The children would be supposed to imbibe the spelling as they studied the other subjects. No one, so far as we know, has carried the method to that extreme.

What is actually done is to look through the lesson of some subject for the day and pick out a few words which are to be spelled by the members of the class when they come to recite that lesson. A few minutes of the recitation period are taken for emphasizing the spelling of the assigned words.

Sometimes teachers select the words from one subject and then devote a special period of the day to the spelling class. This is far from being a pure type of this method of teaching spelling. It can be called "incidental" only because the words are selected from the assigned lessons of other subjects

and are not taken from a spelling book especially designed for that purpose.

When the words to be spelled are selected from lessons dealing with hygiene, reading, and other subjects that the child is studying, the **Advantages** words studied have real meaning to him. They have a purposeful use for him on the same day on which he is studying them.

One of the advantages urged for this method is that it saves time, but this claim does not seem to be valid if time is taken for drill, either at the time of the recitation of the subject from which the words are taken, or at a later time. The fact is that more time may be used because the teacher must select the words and the children must locate them in their books. When we include the time that is certain to be used in retelling the children which words were assigned, we can see that the advantage claimed for this method is doubtful.

Too often the words for special study are selected by chance or by caprice. If the teacher has not made special preparation for the assignment, she selects the words in a haphazard **Objections** manner. Hygiene happens to be the subject selected for the day and the words that her eye falls upon are: *diphtheria, disinfectant, hypodermic, infectious, malignant*.

The probability is that the fifth grade class, to which these words are assigned, will rarely have an

occasion to use them in written composition. This makes little difference. The words are hard; the teacher is rushed for time; the class must have words to study for spelling, and so these are selected for the lesson.

The foregoing discussion suggests another objection to this method. The average teacher does not know just which are the best words, the most needed words, that a child should study. To say this is to cast no reflection upon the average teacher. Relatively speaking, there are very few people who have made sufficient study of spelling to be even fairly certain of the words that should be taught to children at the different stages of their progress. Even those experts who feel that they have a good idea of the words which should be taught would not be able to select the words in this hasty and accidental way. To be able to form this body of opinion, the expert has had to take much time for careful investigation. What can we expect then of the meagerly equipped teacher who must select these words during the rush of a busy day of teaching?

The efficiency of any plan or method of teaching spelling may be fairly well measured by the provisions that it includes for attentive repetition. The "Incidental Method" of teaching spelling and the accidental way in which the words are frequently selected make attentive repetition and systematic review practically impossible.

METHODS OF TEACHING SPELLING 39

If the Incidental Method is to be used, the teacher should inform herself very thoroughly as to the careful scientific studies that have been made of spelling. What others have discovered would then serve as a guide in the selection of the words which she makes for each grade. There is no doubt that a much higher degree of scientific knowledge and teaching skill is needed for the successful application of this method than is required for other methods.

THE TEST-DRILL METHOD

Since Jones made his very illuminating study of the words that children actually use in written composition, there has come into conscious use another plan of procedure that we may properly designate as the Test-Drill Method. The theory upon which this is based is that, since we know what words children actually do use, all that is necessary is to test the children to see if they can correctly spell all those words. (If they can, then it becomes a wasteful expenditure of time for the children to study a spelling lesson each day. If they cannot, the teacher knows at once what words to drill upon and the pupil is made conscious of his own limitations.)

**The Origin
and Appli-
cation of
the
Method**

In applying this method the word list for the grade is taken and divided into groups. The children are tested upon each group of words at the beginning of the week, fortnight, or month, or what-

ever interval the teacher decides to use. The test is given without any warning as to what is to be given, and the children spell without previous study on that particular list. The words that each child misses become his spelling list for the designated period.

Let us illustrate: Four hundred and sixty-nine words constitute the Jones list for the third grade. This would be practically fifty-two words for each month of a term of nine months. Suppose that on the first Monday of each month the teacher tested her class on the fifty-two words in the group for that month. She might find that every member of the class could spell a few of the words. Half the class might spell half the words. A few members of the class might be able to spell eighty per cent of the words. Two or three members might be able to spell all the words.

Those words that were spelled by all members of the class might be eliminated from the list for study for the month. The teacher would know at once the relative needs of each child. Each child would know exactly what words in the list for the month he could not spell. He would discover his own limitations and would be held in the class only so long as it was necessary to overcome those limitations.

When this method is used the teacher should apply the process of elimination to her class. She

should do this by taking a few words each day for study and drill. Those words that were misspelled by the greatest number should be selected daily. In this way the better spellers would complete their lists and be eliminated from the class and there would be retained in the class those who needed most help and most practice.

**How to
Conduct
the Class**

This method of teaching spelling focuses the attention of the teacher and the children upon the particular words that must be given special attention.

Advantages

It excuses from the class those children who do not need to devote the time to the work. It keeps each child on the task only so long as he needs to continue and frees him as soon as he has completed his task. He may then devote himself to more profitable work.

The Test-Drill Method frees the teacher from teaching a large class and permits her to give her time and attention to the children that need them.

This method is based upon the supposition that children already know the meaning and have a mastery of the use in speech of the words that they are to spell. This is a supposition contrary to fact. Some children will know. Many children will not know.

Objections

The method is also based upon the idea that the sole purpose of the spelling class is to teach the order of the letters in the word, and to make the spelling

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of the word automatic. The opponents of this method object, therefore, to its poverty of ideas. They say that while the habit of correct spelling is the goal sought, it is not necessary to rob the teaching of spelling of all other associated values in order to attain that end.

If this method is to be used by the teacher, the closing days of the month, or whatever period is chosen, should be used for reviews. All the members of the class should participate. Some such devices as those suggested in the last chapter of this book may be used to motivate the reviews. Practically perfect spelling of the chosen list of words should be expected from all members of the class at the close of each month when this method is applied.

THE TEACHING-STUDY METHOD

Very clearly contrasted with the preceding plan is one in which the spelling recitation period is thought of as one of energetic teaching on the part of the teacher and one of very thoughtful study on the part of the pupil. In this method, the teacher holds herself responsible even more than she does the children. She makes herself responsible for the certainty that the child is conscious of the correct pronunciation, accent, meaning, use of each word, and also that he develops the habit of correctly

The Spelling Lesson as an Exercise in Thinking

spelling the word. She starts with the assumption that he does not know, instead of the assumption that he does know, as in the preceding method discussed. The spelling lesson is thought of much more as a teaching exercise than as a testing or a drill exercise. While there is testing and a great deal of drill, these come as subsequent to and secondary to the teaching. The advocates of this method follow some such procedure as the following :

(1) The teacher writes the list of words very plainly on the board and uses each word in some suitable sentence as she writes it. She has the children look at the word for an instant and then she pronounces it again very distinctly, being very certain to give the correct value to each syllable.

(2) The children then pronounce the word. At first, some child is called upon who will be sure to pronounce it correctly and distinctly. Then some one who would not have been likely to pronounce it so well, if asked to do so first, pronounces it. Finally, the entire class is asked to pronounce it in concert.

(3) The word is then used in sentences by the children. This is done to make certain that the children have a clear understanding of its meaning, and facility in its use. The definition of the word is not asked for. Webster had some difficulty in making clear the meaning of words by definition. Of course, a child in the elementary school would have even more trouble. The aim is not abstract definition — it is practical use.

(4) The children then take a few minutes to study the words as they appear on the board. They note the order of the letters. They close their eyes and see if they can

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recall them in clear mental images. They discover where the difficulties of the words are for them and then attack those difficulties.

(5) The words are next erased from the board and dictated to the children. They write the words.

(6) The written words are next checked by having one child spell aloud from his paper and having the other members of the class check their mistakes, or by some other method upon which the class may agree. Each pupil notes his mistakes and puts them down on his own "black list" for further study.

(7) The words that are taught one day are used for review on the following day and at definitely increasing intervals thereafter.

Sound psychological principles are applied in using this method. A vivid initial impression is secured by the pupil. He has the impression multiplied and increased through the eye, ear, hand, and tongue. Attentive repetition is secured through the variety of means used.

The class period is a thought-provoking period and not one merely of monotonous repetition.

Words are presented and used in expressing ideas. When learned in this way the words will recur naturally when need arises for them in written composition.

Believers in the Test-Drill Method of teaching spelling very naturally urge the following objections to the Teaching-Study Method:

If only the words that children actually use and therefore already know are taught in the spelling

work, then much of the work indicated above is not only useless, it is wasteful if not silly.

It is unwise to subject all pupils — the efficient and the inefficient — to the same task and the same routine.

If the purpose of the spelling class is to teach spelling, why take the time to turn it into a language recitation?

The conflict is sharp and the distinction clear between the theories upon which the Test-Drill Method and the Teaching-Study Method of teaching spelling are based. The conflict arises chiefly from a disagreement as to the purpose of a spelling recitation. Your conclusion upon this point should determine the plan that you follow.

Conclusion

THE CONTENT-DICTATION METHOD

A method that is designed to combine the best features of the three preceding methods may be characterized as the Content-Dictation Method. The best books which make use of this method are built upon the following principles:

The
Principles
upon
Which It
is Built

(1) For each new lesson, a few new words — from two to six — are presented in a meaningful context that is within the comprehension of the child.

(2) The context is in the form of a paragraph that is composed of words that are a part of the child's vocabulary as determined by Jones and others.

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(3) The new words are so presented that they will make a vivid initial impression upon the child and so that he will understand their meaning and become accustomed to their use.

(4) Through the repetition that occurs in the paragraphs, sufficient provision is made for drill. This is supplemented by other devices.

(5) Since spelling is used in practice only when we write, the new words are presented to the pupil in a dictated paragraph which he writes. In this way, from the first, the contextual impression of the word that the pupil receives is correct. From its first presentation, it has meaning for him.

Recalling the Incidental Method, we shall see that its chief claim to merit comes from the fact that

Relation of the Content- Dictation Method to Other Methods	the words were selected from subject matter that had real meaning for the children. The Test-Drill Method derives its strength from the fact that the attention of the teacher and the pupil is focused upon those words that demand attention and practice. The Teaching-Study Method has as its chief virtue the fact that the intellects of the teacher and the pupil are actively engaged, respectively, in a clear and correct presentation of the word and in a mastery of it. If the Content-Dictation Method, through the books that make application of it, has succeeded in combining all these qualities without the weaknesses that are charged to each, then this is an accomplishment indeed.
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In teaching according to the Content-Dictation Method, one of two possibilities is open to the teacher. She may take the new words for **Mode of** the lesson that occur in the paragraph and **Procedure** teach them as was suggested under the Teaching-Study Method. After having done this, she may dictate the paragraph. This will give opportunity for testing the teaching of the new words and for reviewing the old words that have been previously taught. On the other hand, she may dictate the paragraph first. Some children will probably spell correctly even the new words. If the assumption is correct that only the words that they actually use are being presented, this will be more likely to be true. Those children who do not spell the words correctly will be made immediately conscious of their need and will then be prepared for an intelligent and intensive study of the new words. In this event, we would have an application of the principle of testing first and then teaching where weakness is found.

This method presents the new words to the children in a context that will usually have meaning for them.

It necessitates spelling in written com- **Advantages**
position, which is the only form in which spelling is practically applied.

It provides for constant review in writing of the words most frequently used in written composition.

Many of the dictation exercises of any book which systematically develops a vocabulary made up of certain predetermined words must necessarily be somewhat mechanical. Such a spelling book must endure the handicap, suffered by the phonetic readers; of being limited by the conditions which it must follow in order to attain its expressed goal.

Its dictation exercises cannot be universally significant. A paragraph that would be most significant to a child of English origin living in Staunton, Virginia, might mean little to a child of Italian origin living in Boston, a French child in Thibodeaux, Louisiana, an Indian child in Sulphur Springs, Oklahoma, a Mexican child in El Paso, Texas, a German child in Bismarck, North Dakota, or a Swedish child at Bemidji, Minnesota.

EXTRAVAGANT CLAIMS FOR VARIOUS METHODS

It is wise for the teacher to take with a grain of salt the extravagant claims made by the proponents of the various methods of teaching spelling.

Caution Without doubt the advocates are honest in their claims and sincere in their beliefs. Doubtless, also, there is much truth to justify the claims. The proponent has probably tried his method and found that it gives excellent results. His errors arise from the fact that he has not given all the other methods an equally enthusiastic and fair trial.

Certain psychological principles that are applicable to spelling have been experimentally proved. The difficulty in deciding the advantages of one method over other methods lies in the fact that each has certain sound principles for its support. Before we can know that one method of teaching is better than another, the two methods must be carefully compared by competent and impartial experimentation, conducted according to principles that are scientifically sound. Such comparisons of the various methods of teaching spelling have not yet been made with sufficient accuracy — with the goals agreed upon, the situations equivalent, and the materials the same — to justify the extravagant claims of superiority of any method of teaching spelling over all other methods.

It is probable that there will be much scientific study within the next few years of the relative merits of the various methods of teaching the different school subjects. It is hoped that this discussion will lead to a series of experiments in the various school systems of the country for the purpose of testing the merits of the different ways of teaching spelling, and of providing word lists so selected and arranged as to be suited to the various stages of the child's advancement. Some of the following chapters will discuss word lists.

Textbook form and pedagogical procedure are often closely related. The type of textbook used

in the teaching of spelling will have much to do with the type of method which the teacher will use.

Conclusion But the teacher should not be a slave to the adopted text. She should know that there are other ways of teaching spelling besides the one which the author of her text advocates. She should know the reasons for the other ways. This will give her a pedagogical freedom that cannot be had in a slavish following of one text. There will be situations which arise in every class that will call for the application of all the methods discussed in this chapter. If the reading of this chapter has given to the reader a grasp of the principles involved in each method discussed to such an extent that she can apply them successfully when the situation in which they are needed arises, then this chapter will have served its purpose.

The teacher must ever bear in mind that textbooks are not sacred and a particular method is not a law of the Medes and the Persians. The child's needs and the teacher's wisdom are the two determining factors. Materials and methods are means, not ends.

SUMMARY

The types of teaching procedure, used in the teaching of spelling, can be clearly understood when thought of as the Incidental Method — the Test-Drill Method — the Teaching-Study Method — the Content-Dictation Method.

Under the Incidental Method spelling is taught by

correlating it with the other school subjects instead of by using a special text.

When the Test-Drill Method is applied, only those words with which children are already familiar are presented for study. The class is first tested to see what words they can already spell. Only those words that they do not spell correctly are given special attention.

The Teaching-Study Method is the opposite of the Test-Drill Method. In this case, the words are first carefully taught by the teacher and studied by the child. Drill is one of a number of phases that receive emphasis.

The Content-Dictation Method is an attempt to teach spelling through written composition. There is a careful selection of new words put into a meaningful context which is dictated to the child.

Each method has its advantages and is supported by sound principles. The teacher should study the principles of each and apply each as occasion requires.

QUESTIONS AND EXERCISES

1. Summarize the four methods of teaching spelling discussed in this chapter, giving the advantages claimed for and the disadvantages charged against each method. Do you agree with this analysis? State your reasons.

2. Give five situations in which you would deem it wise to use the Incidental Method.

3. If you were using the Test-Drill Method, how would you provide employment for those pupils who were excused from the spelling class?

4. Does the lesson plan of the Teaching-Study Method appeal to you as a teacher of spelling or do you think you would find it irksome? If so, why?

5. What are the advantages and disadvantages to the pupil when the teacher composes her own dictation exercises for the use of the class in spelling?

CHAPTER II

SPELLING BOOKS

THE spelling book has had an interesting history. From the days of Noah Webster, when he gave to the world his famous Blue Back Speller, to the present, spelling, as a separate subject, has usually been recognized as one of the fundamentals. For a few years, about the close of the last century, the spelling book fell into disuse because of the revelations made by Dr. Rice and by Dr. Cornman, referred to in Part I of this book; but in recent years the schools have been using spelling books because it was found that teaching spelling in an incidental fashion was not producing the desired results. A constantly growing number of books and a wide variety of methods for use in the elementary grades of our schools have been presented for the consideration of educators. We have before us forty different spelling texts that have been used in the public schools of America. Of this number we find, upon investigation, that there are twenty or more different texts that are now in use in the different states of the nation. These texts represent all the various psychological and pedagogical ideas

that have been urged at any time since spelling as a subject began to be taught in our schools.

To the layman, all spelling books are alike. A "spelling book is a spelling book." "Pigs is pigs." But, to the person who has made a study of spelling, there is as great a difference between one spelling book and another as there is between the pure bred hog of some modern breed and the little creature that is dignified by the title of guinea pig.

Are All
Spelling
Books
Alike?

"But," you ask, "just what are the differences? Do they not all contain words? Is it not a matter, after all, of learning to spell words?" So it is. So it was a matter of growing meat with the hog raiser, but he found that there was a difference in the price of the product when he fed a pure bred hog and when he fed a poorly bred hog. He also found there was a difference due to the kind of ration and to the time of feeding. With the learner, it is a matter of learning to spell, but his results will depend much upon what he has to work with and also the manner in which he does his work. Spelling books differ greatly in their general plan, in the words they contain, and as much, if not more, in the psychological laws that they call into operation.

Because of these differences, we give below an analysis of the various types of spelling book. They may be divided roughly into five types.

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The first of these types may be called the logical type because logical arrangement determines the placing of the words. The old Webster's **The Logical Type** Blue Back Speller is the oldest and best recognized example of this group. Words were arranged according to the number of syllables. Such matters as the learner's need, probability of use, and the laws of association, were entirely disregarded. That one word had as many letters as another or had a sound similar to that of another was sufficient reason for the two to be placed in the same group, even if one of those words was already well known to the child and the other was one that he need never know and would never use. There has been a large progeny of this type of spelling book. The logical spelling books were favorites in the days when the oral spelling bee was common. The words they contain are excellent for use on such occasions. They are not suitable for everyday use in written composition and it is only in written composition that spelling is really used.

In order to illustrate the mechanical qualities of these logical spelling books we give herewith the first and last groups of words given in one of the texts:

ache
adz
aid
aim

unintentional
university
unmentionable
utilitarian

aisle	valetudinarian
alms	vegetarian
ought	verification
auk	veterinary
aunt	volubility
awe	voluntarily

A glance at the above lists will reveal several things: (1) They are mere lists of words picked from the alphabetical lists as they are found in the dictionary. (2) Few of them are words that children would use. (3) Some of the words that are given in the first lesson in the book would not be used by the children any earlier than would the words that are presented in the last lesson. The element of service seems never to have been considered in the arrangement of the materials.

The question before the teacher is: If I have such a text as the above and if I must, according to the rules of the authorities, use it, how shall I handle it?

The first thing to be done is to get clearly in mind the aims that are to be followed. These aims have a twofold purpose for the child:

(1) To learn more fully the meaning and use of the words already a part of the child's speaking, hearing, and reading vocabularies.

(2) To learn how to spell the word so well that the spelling itself gives the writer no cause for thought or concern when he is to use it in written composition.

The author of such a book did not have these aims in mind, for, had this been the case, the materials

would not have been so arranged. With such a text, the teaching phase of the class work must occupy an unnecessarily large part of the teacher's time. She must think out some plan of association to use in presenting the words, in using the words, and in reviewing the words. This will be difficult and wasteful of the teacher's time, but it will result in economy in the time of the children and in more efficient work. To put these words into one paragraph so as to show their meanings would be rather difficult and would produce compositions of sublime absurdity.

See the following paragraph as an illustration of an effort to put into suitable context the first ten words referred to above :

"The boy suffered from a dreadful *ache*. Aid was given but it did not accomplish *ought*. He died and was taken down the *aisle* of the church. The coffin had been hewn with an *adz*. The scene filled all who saw it with *awe*. The *aim* of the spectators was to give *alms* to the poor relations but the rich *aunt* objected, saying that she would provide for their wants from her *auk* farm in the far north."

With such a context, the child would probably become so much interested in the somberness of the story or so curious about what an auk farm was that he would lose all interest in the spelling itself. Such original, continuous paragraphs, therefore, seem not

advisable. With such a list of words the aim should be merely to teach the meaning of the word as it would occur in a sentence. The child should remember the word for its own sake and not for the story's sake. The following sentences will illustrate how these words may be presented in a suitable context :

1. I have an *ache*, or pain, in the back of my head.
2. The *adz* is a tool used by builders of log houses.
3. *Aid* was given to the woman who was in trouble.
4. My *aim* is to complete this task to-day.
5. The *aisle* of the church is the space between two rows of seats.
6. Those who have enough give *alms* to the very poor.
7. I never hear *ought* but good of him.
8. An *auk* is a bird of the far north.
9. Your *aunt* is your mother's or your father's sister.
10. The mountain is so high it fills me with *awe*.

Such a list of sentences can easily be made by the teacher as she presents the words for the first time to the class. Numerous devices must be used for the purpose of giving drill upon such a list of words. The teacher must not take it for granted that a child can spell a word simply because he understands its use or even because he can use it correctly in oral composition. There is no proof of his ability to spell except the actual unassisted correct writing of the word by the child in his own composition.

One of the first things that the teacher must learn is that she must use her own judgment in selecting words that are to constitute the child's lesson. If there are words in a group that is being studied that the teacher knows are foreign to the child's experience, conversation, and reading, then those words should be omitted. Spelling texts are being constantly improved, but even the very best texts admit of selection in order better to suit local situations. What is within the city child's "hearing" and "reading" vocabulary may be entirely foreign to the rural child and vice versa. The more strictly logical type of spelling book will call for more careful selection of words on the part of the teacher, but all spelling books will demand this attention to some degree.

Fortunately for the teachers and the children, the extremely logical type of book has largely disappeared. In spite of that fact, we sometimes hear some one say: "There has never been a spelling book like the old Blue Back; we do not have spellers to-day such as we had in the old days." Let us agree to both statements and be thankful.

The phonetic type of spelling book is a natural descendant of the logical type of spelling book.

The
Phonetic
Type

Instead of making the requirement a certain letter, as the beginning of each word of the lesson group, or the same number of letters in the words or the same number of syl-

lables — as was the rule with the logical type — the phonetic type of spelling book places its emphasis upon similar sounds. It makes its appeal through a group of letters, the sound of which is common to all words in the group, even though the words are not related in meaning. It makes its appeal to the ear and the eye, especially to the ear. It does not concern itself much with association of ideas but rather with association of sounds. The following words taken from one of the best spellers of this type will illustrate this point :

out	broke	pail
about	smoke	sail
pout	spoke	wail
stout	joke	tail
spout	poke	bail
shout	yoke	fail
scout	choke	nail
trout	woke	mail

A perusal of the above lists will reveal the common element in each of the words of these lists. These words are so arranged as to secure with ease and speed the second of the purposes of teaching spelling; viz., "Making automatic the spelling of the words studied." It entirely omits the first of these aims; viz., "The teaching of the meaning and use of the words." Even if a child can spell a word with unfailing correctness when it is in such a list as the above, it is not certain that he will be able

to spell it when it is disassociated from the list and put in a meaningful context.

What shall the teacher do when confronted with a situation such as this text presents?

Fortunately, there are a number of things to relieve the teachers in this situation: (1) With these books, the lists are usually made up of words that are already familiar to the child and are a part of his spoken vocabulary. The main thing, then, that is needed by him is to learn how to spell the words. (2) Since the child can probably commit to memory more of these words in a given time than he can of a group of wholly dissimilar words, he will have some time to devote to such supplementary work as the teacher thinks to be necessary. (3) One of the great advantages of the phonetic type in the elementary grades is that it appeals to the child's natural fondness for rhyme and similarities. Even this must be capitalized, or else it will prove a sameness that kills rather than a similarity that thrills.

The plan of procedure, then, with the phonetic type of spelling book is: (1) to make the most of its good points for rapid, happy, rhythmical drill; (2) to feel free to turn aside and do such other teaching as is not provided for by the book. Remember that it is a drill-device book and not a thought-teaching book.

By far the largest number of spelling books that

are now on the market and coming from the press are of the psychological or language-teaching type. They are based on associated ideas. Sometimes the purpose is more dominantly that of stimulating expression. To illustrate:

The Psychological
or Language-
Teaching
Type

A picture is presented of a boy driving home the cows from pasture at the close of day. After class discussion of the picture, the following words are given for the lesson: *calves, fodder, switch, patient, driving, country, timothy*. The child is then asked to write about the good time he thinks the boy is having. The aim is to teach certain words in a specific connection in order that the child may apply them at once in written composition.

A second illustration of this type is the book in which a group of words, all related to the same thing, are included in one lesson. The two lists of words given below are typical:

Parts of the Body

ear	hair
eye	skull
nose	cheek
mouth	teeth
brain	tongue

A House

portico	piazza
arcade	vestibule
porch	veranda
balcony	passageway

In this type, a selection of literature is sometimes used for class study and then from it are selected certain words for study as drill in spelling. The following selection will illustrate this point:

“The night has a thousand eyes,
And the day but one;
Yet the light of the whole world dies
With the dying sun.”

Words for drill: *died, dies, dying, eyes, whole, thousand.*

A fourth illustration of this type is the book that provides a heterogeneous group of words to be drilled upon but gives a simple sentence to illustrate the meaning of the word, as follows:

tried	The boys tried to hit the frogs.
dance	They danced about the pond.
side	They ran up and down the sides.
toss	They tossed sticks into the pond.
block	They tossed blocks of wood, too.

The books which are written according to the plans that have been illustrated under this third type have one very distinct advantage and are subject to one very great danger. The great advantage is that the words are always presented in a meaningful way. The spelling lesson becomes a thought lesson and not simply an automatic performance. The child will readily understand the

words and will be able to use them in sentences that have meaning to himself and to others. The danger to which this type of book subjects the pupil using it is that his attention will be directed to the thought and not to the "order of letters in the word," which, after all, is what constitutes spelling. Thought content may be taught in other classes. The purpose of the spelling class is to teach spelling, to make automatic the placing of the letters in the correct order in those words that the child has occasion to use in written composition. If this result is not accomplished, then in so far as spelling is concerned, all the other work is for naught. The work may have been interesting as language, literature, art, geography, or history, but it was not good teaching of spelling. Whatever else is done in the spelling class may be finally justified as a part of the teaching of spelling only to the extent that it really aids in making automatic the use of the correct order of the letters.

If the teacher has a language-teaching spelling book, she must bear these facts in mind. She has an implement with which she can make of the spelling lessons very interesting social periods. The spelling lessons may be filled with interesting ideas and happy expression, but the spelling teacher must remember that there must be sufficient review and drill to make automatic the correct order of the letters in the words that are taught. She must

make certain that the words that have been taught have been learned. If the teacher is alert, this will cause her no trouble but only add to her pleasure as a teacher.

There are a number of books that seem not to fall very distinctly under any one of the preceding **Mixed** types but which seem to partake some-
Type what of the characteristics of each. In these books an effort has been made to blend the best qualities of each of the types discussed. What we have said, therefore, in regard to each type would apply, in so far as these qualities are concerned, to the mixed type.

Under the heading, *Miscellaneous Types*, at least three classes of books may be mentioned:

(1) There is the class built upon the theory that the purpose of the spelling book is to present words that are already familiar to the child and a working part of his **Mis-**
cellaneous the child and a working part of his
Types spoken and written vocabulary. Under such circumstances, all that is needed is to find what words occur most often in his vocabulary and to arrange them accordingly for class study. The purpose of teaching spelling with such a book is not to teach the meaning of but merely to test the ability to spell these old familiar words. If the pupil cannot spell them correctly, then the teacher must correct his errors and drill upon the correct spelling until it is automatic. Thus the spell-

ing task becomes, first, one of testing, and then one of drill. While review, repetition, and drill are essential in making automatic the order of letters in the word, the scope of the spelling class and the material of the recitation need not be so restricted as such a text would imply.

(2) Somewhat related to the above class of books is the one which makes drill its one distinguishing feature. It presents but few words for each new lesson, usually two. It provides for a series of reviews coming at intervals of increasing length. This book has in its favor certain fundamental psychological laws which function in memorizing and which operate against forgetting. The teacher should profit from the principles applied in such a text, but should remember that here, as with other texts, the teacher's own ability must function in providing devices that give variety in order that the scheme of repetition provided may not make the work monotonous.

(3) A third example is the book that depends chiefly upon similarities of vowel sounds and of consonant sounds, and that emphasizes diacritical marking. This is a distant offspring of the old logical type described in the beginning of this discussion. It follows strictly logical principles. It finds some element in a group of words that is alike or something in them that is different and it emphasizes this similarity or difference.

Illustration: *o* like *e*, as in *odor*, *ardor*, *armor*, *harbor*, *humor*.

y like *i*, as in *dye*, *type*, *style*, *rhyme*, *lying*.

The great weakness of this type of book is that, although it associates ideas, the ideas are very abstract and unimportant and are so varied that they confuse rather than clarify the problem of spelling.

That the first of the miscellaneous types of books could show results should be expected. It undertakes so little that it should succeed in what it undertakes. That number two could boast of good results is only natural. A drop of water dropping constantly on a rock will finally make an impression. That number three should be able to make a good showing would be a miracle indeed.

While we have tried in the preceding pages to give the teacher an analysis of the various types of spelling books that are now before the public and in use in our schools, it must be understood that we have merely given our own analysis and judgment.¹ The relative value of different types of books in accomplishing different desirable ends has not yet been scientifically determined. One of the opportunities of the classroom teacher of to-day is definitely to settle some of these problems which clamor for solution.

¹See a related analysis in the *Journal of Educational Research*, Vol. I, February, p. 119, Article by Clifford Woody.

SUMMARY

Spelling books may be grouped, roughly, according to their most dominant characteristics, under the following classifications: (1) Logical, (2) Phonetic, (3) Psychological or Language-Teaching, (4) Mixed, (5) Miscellaneous.

The Logical Type is the oldest. Its lessons are composed of words that have one common element such as the same number of letters, syllables, the same initial or final letter, and the like. Physical similarity is the determining factor.

The Phonetic Type makes similarity of sound its controlling factor. It is a logical speller in that it emphasizes the logic of tone, whereas the earlier speller emphasized the logic of structure.

The Psychological or Language-Teaching Type is a book that makes the association of ideas the central thought. The aim is to teach spelling but to do so in such a way that it shall be accompanied by much good language work.

The Mixed Type is a book in which the various characteristics of all types are so interwoven that it seems not to have a definite method of its own.

Miscellaneous Types is a term chosen to represent all those that do not fall clearly within one of the types mentioned before. Under this heading might be classed a number of books now before the American school public. Only three have been mentioned: first, a book that makes the child's own vocabulary the limit of the text; second, a book that makes repetition the major factor; third, a book that makes word similarities that are determined by diacritical marking the basis for the teaching effort.

QUESTIONS AND EXERCISES

1. Summarize the characteristics of the first four types of books discussed in this chapter. Does the text which you use belong to one of these types? To which?

2. What are the characteristics of the three books described under Miscellaneous Types? Does your adopted text belong to one of these types? To which?

3. Which of the eight kinds of books described in this chapter would you prefer to use as a text? What are the arguments you would use to induce your book commission to adopt your choice?

4. Describe an experiment you might conduct to test the relative merits of two or more spelling texts with which you are familiar.

CHAPTER III

STANDARDS BY WHICH TO MEASURE SPELLING BOOKS

TEACHERS in the elementary schools of our country should be able to measure the merits of the texts that they use. A survey of the spelling texts that are now in use throughout the United States shows very clearly that the teachers of the country and the school committees who select the books for the teachers have not in the past been very familiar with spelling book standards. We give below a few of the fundamental principles that we feel every book intended for use as a text in spelling should meet. We believe that if the teachers will measure the particular texts that they happen to be using by these standards, it will aid them in discovering the weaknesses of their books and the weaknesses of their own classroom work, and will thus make it possible for them to correct hitherto undiscovered defects.

(1) Does the text present the words that a child uses and needs now and will need very soon?

Dr. W. Franklin Jones has made a study of the words that children actually use at different ages

and in the different grades of school. His list of 4532 words and the Ayres list of a thousand words are the most reliable sources of material that are available for use in these grades. Other lists of value, concerning which more will be said in the next chapter, are now coming into public recognition, notably the Iowa Spelling Scale. These lists present the minimal essentials, so to speak, of what all children will need, without reference to locality, present environment, or proposed occupation. One of the possible criticisms of the Language-Teaching spelling books, discussed in the previous chapter, is that they usually have a number of lessons included that are not applicable to all sections of the country or to the social and vocational environment of all pupils. But these lessons are not particularly objectionable if the teacher will use common sense and omit such special groups of words as will awaken no past experience or fill no future need of the child. Some books contain as many as five thousand words, while careful examination of the facts reveals that not more than half that number are really used by the child. That the child may need a word and may use it when he is grown is no reason for having him learn to spell it when he is a pupil in the third grade.

(2) Is the material of the text so arranged that it lends itself to the instruction, inspiration, and information of the child?

If the material is not so arranged, the text is no better than were those of a century ago, before the laws of psychology were made known by much experimentation with cause and effect, situation and response, satisfaction and annoyance, association, etc. The teachableness of the words will depend chiefly upon their grouping. Interested attention, an element absolutely necessary to the teaching of spelling, depends upon the grouping of the words. Just how can they be so arranged as to beget the maximum amount of thoughtful, voluntary, and continued attention? This is the problem for the text maker, and an important claim to merit for his text should be based upon his success in this particular.

Arrange-
ment of
Material

Provision
for Correct
Habit
Formation

(3) After we are sure that the author has given us a text that is thought-provoking, idea-stimulating, neurone-exciting in its nature, the next thing that concerns us is: What means has he provided to make habitual the exact reproduction of the order of the letters in the words by the child whenever the child has to write the words? In other words, what means has he used for providing drill for the words that he has presented in such an attractive manner? Experimentation shows that man forgets very easily and very quickly. It shows further that he forgets more rapidly just after a thing has been learned than he does later on. We must therefore make certain

that means are provided for drilling on new words very soon after they have been learned. There must be other drills at intervals increasing in length. The text itself should be fertile with suggestions and illustrations as to how drills may be made interesting. The text maker should know much more of this than does the elementary teacher and should not fail to give her the benefit of that knowledge.

(4) To what extent does the book make use of phonetic principles and devices?

Spelling is largely a phonetic process. This is particularly true in the earlier work of the child.

**Use of
Phonetic
Devices** However, even during the first year in which the child makes a systematic study of spelling, the device of phonetic resemblance should not be the only means of association used. He will, it is probable, have learned much of phonetics in his reading classes during the first two years of his school life, even if he has not taken up the systematic study of spelling. By the time he has completed his third school year he should have a practical mastery of elementary phonetics and his attention should be centered upon other types of association and other ideas that will interest him vastly more than will the phonetic similarities of words.

(5) Does the book make sufficient use of similarities and of contrasts in the form and meaning of words to stimulate thinking by the child?

Although spelling lessons should gradually enrich the child's mind with thought content, and although the process must make habitual the correct order of letters in words, it must not be felt that it is outside the province of the spelling lesson to call for careful observation of similarities and contrasts, and the liberal use of reason in arranging words in groups according to form or function. Such work will serve to impress the order of the letters and the meaning and function of the words far more than will mere repetition. Such exercises will give repetition and at the same time will hold the pupil's attention.

Use of |
Com-
parison
and Con-
trast

The above suggestion must not be taken to mean that the teacher must work to see just how many problems she can discover that can be worked out in connection with the spelling lessons. The reasoning phase of the work can be easily overdone. One text that came to our notice had used this device to such an extent that it had become a modern illustration of the ancient mental arithmetic. Everything the author could think of had been compared or contrasted. So much was this true that one, in making a study of the book, came to feel that it was not meant to teach spelling but to test one's ingenuity in solving little spelling and language puzzles.

In conclusion, it may be said that while the above standards should apply to the material and

methods of every good spelling book, it does not follow that a book must be cast aside as worthless if it does not contain all these elements. The authors of spelling books usually are deeply imbued with one idea. They are perfectly honest in putting it forward even to the point of overemphasis. They have usually tried out in many classrooms the plan which they present and they have the satisfaction of knowing that it worked. If it worked in their classrooms, it will work in yours. This is true. But it is also true that you may be able to use such of their ideas as seem wise to you and, at the same time, supplement these ideas with suggestions from other sources. To point out ways of doing this is the purpose of this discussion. If a study of these standards serves to give to the teacher a broader view and greater independence of method, then they will have served the purpose for which they are set forth.

SUMMARY

Teachers in the elementary schools should be able to judge the merits of the books that they use. This ability will aid them better to adapt their methods to the children's needs and to offset more effectively the text's limitations. The following questions, when answered with fairness and good judgment based upon the facts in the books and the scientific literature on the subject, should give the teacher a fair estimate of the merits of a text :

Does it present the words that a child needs and uses now and will need and use very soon?

Is the material of the text so arranged that it lends itself to the instruction, inspiration, and information of the child?

Has the author provided drill for the purpose of making habitual the exact reproduction of the order of the letters in the word by the child whenever he has to write it?

Does the book make wise and helpful use of phonetic principles and devices?

Does the book make sufficient use of similarities and contrasts in the form and meaning of words to stimulate thinking by the child?

A book may be a valuable book even though it does not conform to all these standards. Few books do. But the teacher should understand that it is her duty to supply what the book lacks.

QUESTIONS AND EXERCISES

1. Consider the different types of spelling books available in your community. Try to identify each of the books with one of the types discussed in Chapter II. To how many of the standards set forth in this chapter does each book conform?

2. What principle does the author of each spelling text examined by you, follow in presenting the words to the children for the first time?

3. What plan is used in each text for making habitual the spelling of the words?

4. Select from each text five words that you know are frequently misspelled and trace them throughout the book. How many times and at what intervals are they presented?

CHAPTER IV

SPECIAL LISTS AND HOW TO USE THEM

IN Part II of the Eighteenth Year Book of the National Society for the Scientific Study of Education, Dr. Ernest Horn, of the University of Iowa, has presented a very careful summary of all the more important experiments and investigations that have been made in connection with the teaching and learning of spelling. Of this compilation of more than one hundred significant experiments and investigations, we shall concern ourselves in this chapter, primarily, with only two. The first of these is the list of "One Hundred Spelling Demons" prepared by Dr. Franklin Jones, recently of the University of South Dakota. The second is "A Suggested Minimal Spelling List" arranged by grades, prepared by one of the authors of this guide.

"ONE HUNDRED SPELLING DEMONS"

Dr. Jones investigated the following problem :

"What words, grade for grade, do children use in their own free written speech, and what words, therefore, do they need to know how to spell?"

To answer this question, Dr. Jones selected 1050 children in four states, distributed from the second to the eighth grades inclusive. He had ^{Source of} each child write from fifty-seven to one ^{Material} hundred and five compositions and then he counted the number of words that were used by each child and the number of words that were used by all the children of each of the seven grades. His discoveries were very interesting. He found that the children of the second grade used 1927 words in all.

The third grade added to this number	. 469 words
The fourth	442 words
The fifth	432 words
The sixth	425 words
The seventh	419 words
The eighth	418 words

Thus, the number of words used by all children in each grade group varied from 1927 used by the second grade to 4532 used by all the children from the second to the eighth grade inclusive. The interesting point in this whole matter and the one to which the attention of the reader is especially called is this fact: More than nine tenths of all words that were misspelled by these 1050 children were found in the 2396 words that were in the written vocabularies of the second and third grades. The one hundred words that caused the greater part of the trouble have been dubbed "The One Hundred Spelling Demons" and are given as follows:

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which	can't	guess	they
their	sure	says	half
there	loose	having	break
separate	lose	just	buy
don't	Wednesday	doctor	again
meant	country	whether	very
friend	February	believe	none
business	know	knew	week
many	could	laid	often
some	seems	tear	whole
been	Tuesday	choose	won't
used	wear	tired	cough
always	answer	grammar	piece
where	two	minute	raise
women	too	any	ache
done	ready	much	read
hear	forty	beginning	said
here	hour	blue	hoarse
write	trouble	though	shoes
writing	among	coming	to-night
heard	busy	early	wrote
does	built	instead	enough
once	color	easy	truly
would	making	every	straight
since	dear	through	sugar

Practically any child that is advanced enough to be in an intermediate spelling class is mature enough to know how to spell or to learn to spell the words in the above list. They are in a sense difficult. If the reader will glance over the list she may find a number that even yet give her trouble in her own written work. This is due to the fact

that at the right time those words were not so taught and so drilled upon that their spelling became automatic in the mind. What an obligation, then, upon the teacher to see that the children whom she teaches shall not be similarly handicapped and embarrassed during their lives by the inability to spell words in such very common use — words that can be so easily taught and learned if they are taught in the right way and learned at the right time.

We are confident that another shorter list of Spelling Demons of another type of words could be discovered were one to make a careful study of the errors that children make in the spelling of words that call for the use of the hyphen and the apostrophe. This could include possessives, contractions, and compounds. A suggestive study of this question is presented in the *English Journal* for June, 1919, by John A. Lester. His discussion relates particularly to this difficulty as related to college Freshmen, but an even more fruitful study of it might be made as it is related to the elementary school.

A SUGGESTED MINIMAL SPELLING LIST

“A Suggested Minimal Spelling List,” referred to above, is presented here because it serves as one of the most comprehensive summaries of the various spelling lists that have been developed by investigators who have studied this question, and

because it groups together those words that must be taught by the teachers and learned by the children of America if correct spelling is to be a result of our educational system. It is hoped that this tentative graded list will meet the popular demand for a short list containing the most commonly used words.

It has been assumed that a useful spelling list should contain: first, the words which children in **Material** the elementary school are most likely to **Included** use in their daily written work; and, second, the words which will be most frequently used after the pupil leaves school.

This list was compiled from the following spelling tests and word lists:

Professor Jones' *Concrete Investigation of the Material of English Spelling*. This is probably the most thorough-going of the publications examined. It presents 4532 words derived from the study of 15,000,000 words in the themes of 1050 elementary school children, grades 2 to 8, inclusive.

Common Essentials in Spelling, a list of 3470 words, prepared by C. K. Studley and Allison Ware. It is a compilation of the words found in Dr. Leonard P. Ayres' *Spelling Vocabularies of Personal and Business Letters*, those included in a list prepared by Miss Effie McFadden and Dr. Frederic Burke of the San Francisco, California, State Normal School, and the words found in the compositions of the children of the Chico District, California.

Mr. Algar Woolfolk's list, containing 411 words from the written work of children in grades 3 to 8, inclusive, of the Horace Mann School, New York City, the public

schools of Newark, New Jersey, and those of Richmond, Virginia. This list includes only words which were misspelled four or more times in the manuscripts examined.

Mr. Homer J. Smith's list of 1138 words as derived from a total of 12,500 words used in the spontaneous compositions of elementary school children in grades 3 to 8, inclusive. The list omits numerals, all proper nouns, pronouns, prepositions, and some conjunctions.

The Johnstown, Pennsylvania, Spelling List, prepared by the teachers and supervisors of the public schools. This list has been incorporated in a series of spelling books, containing approximately 4000 words, for use in grades 1 to 8, inclusive.

The lists prepared by the teachers of the Boston public schools who were asked to contribute minimal and supplementary word lists for all the elementary grades. The former contain 840 words; the latter, 2542.

Dr. Leonard P. Ayres' Measuring Scale for Ability in Spelling. This contains one thousand words compiled by the author from the most frequently occurring words in (1) his study of the *Vocabularies of Personal and Business Letters*, (2) Cook and O'Shea's study of personal letters, (3) Eldridge's newspaper list, (4) "the 358 most frequently occurring words in an aggregate of 100,000" found in the Bible and "various authors" by Reverend J. Knowles of London, England.

Hick's Champion Spelling Book. Only the words emphasized in daily lessons, 1872 in all, are included, the assumption being that they are not only the most frequently misspelled, but also the ones in most common use.

An examination of the following lists showed what words would probably be found in the vocabularies

of business people, and, consequently, in the vocabularies of pupils going to work upon the completion of the elementary school, or earlier :

Spelling Vocabularies of Personal and Business Letters. The 542 common words found in this study of Dr. Leonard P. Ayres are probably too well known to need discussion.

Mr. W. E. Chancellor's list consisting of the 1000 most common words, compiled from his personal correspondence as superintendent of schools.

Professors Cook and O'Shea's list consisting of three thousand words from the correspondence of thirteen adults.

The newspaper list compiled by Mr. R. C. Eldridge of Niagara Falls, New York, is the most comprehensive of all the lists examined. It consists of six thousand words from two pages of each of four Buffalo, New York, Sunday papers.

In all the lists examined, the noticeable frequency of a few words indicates that they are the commonest ones in the daily business and private correspondence of most people. According to Mr. Eldridge, "the first 750 words" in his list "with their repetitions, constitute more than three-fourths of all the words on the eight pages from which they have been drawn, and probably a large part of these words will be found in nearly the same proportion in any English conversation or printed matter." Dr. Ayres tabulated the first words in each line of several hundred letters, 23,629 words in all, including repetitions ;

542 words with their repetitions made up seven eighths of the total number, while 23,087 with their repetitions constituted the other one eighth. Mr. Knowles' 358 words with their repetitions comprised 75 per cent of the 100,000 words which he tabulated.

Owing to the wide geographical distribution of the places from which the lists came, the individual lists contain many words of purely local significance. The common words which form the nucleus of our written vocabulary are found to a large extent in all the lists.

After the lists had been selected, each was numbered, and all the words were checked in a dictionary. The figure 1 was placed before every word in the dictionary which occurred in the Eldridge list. The figure 2 was placed before each word that was found in the Jones list. The other ten lists were checked in the same fashion. All together, about 30,000 words were checked. By far the greatest number of words in each list occurred in only one list, a somewhat smaller number in two lists, and so on down to 121 that were common to 10 lists, 54 common to 11 lists, and only 9, viz., *again, any, believe, look, many, money, remember, there, and through*, that were found in all the lists.

It was arbitrarily decided to include in the final list all words which occurred in at least six of the twelve lists examined; there were 1309 such words.

Arranging the words by grades presented a much greater difficulty than their selection. An examination of eight graded lists; viz., The California and Johnstown spellers, Hick's *Champion Spelling Book*, and the Boston, New Orleans, Richmond, Smith, and Woolfolk lists revealed much difference of opinion as to where some of the words should be placed. Thus, *accept* was put in the third grade list by one author, in the fourth by a second, and in the fifth by a third, in the sixth by three, and in the seventh by two. It appears among the sixth grade words in the appended list. *Address*, which appeared in three fifth, one sixth, and one eighth grade list, has been placed in the fifth grade of the appended list. *Am*, which was found in first, second, and fifth grade lists, most frequently in the last, was placed in the fifth grade. Each word in the entire list was assigned to the grade agreed upon by the majority of authors investigated, although in some cases the placing appeared to be pedagogically unsound. Some words could be classified very readily because of the close agreement as to where they belonged; when there was an exact division of opinion as to the location of a word, this word was placed in the lowest grade mentioned. As was expected, most of the words fell into the primary grade lists, a considerably smaller number into the intermediate grade lists, and comparatively few into the grammar grade lists. The distribution was as follows: 318

words in the second grade, 342 in the third, 216 in the fourth, 164 in the fifth, 135 in the sixth, 96 in the seventh, and 14 in the eighth.

SUGGESTED MINIMAL SPELLING LIST, ARRANGED BY GRADES

(Second Grade)

318 words

add	been	brother	cost
after	bear	burn	could
ago	bed	but	count
air	before	buy	cow
alone	beg	by	cross
also	begin	call	cup
am	belong	came	cut
among	best	candy	dark
an	better	card	dead
ankle	bill	care	dear
are	bird	cart	December
arm	black	case	deep
as	block	cat	did
ask	blue	catch	dirt
asleep	boat	cent	do
at	body	chair	done
ate	boil	change	doctor
August	book	chicken	dog
aunt	both	church	dollar
away	box	clerk	don't
bad	boy	coat	door
ball	bread	cold	down
bank	brick	comb	draw
basket	bright	come	dress
be	bring	copy	drink

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drop	from	head	late
drowned	front	hear	lay
dust	full	heard	lazy
each	game	heart	leaf
ear	garden	help	leg
early	get	her	lesson
east	getting	here	let
even	girl	high	letter
ever	give	hill	long
every	go	him	make
eye	goes	himself	making
face	going	his	me
fair	gone	home	meet
fall	gold	horse	men
far	good	house	more
fast	got	how	mother
father	grass	hungry	mouse
feed	great	hurt	mouth
feet	green	I	my
fence	ground	ice	near
few	grow	if	never
fill	guess	ill	new
find	had	in	next
fine	half	into	nice
first	hair	invite	no
fix	hand	is	nose
flower	hang	it	not
fly	happy	jump	of
fowl	hard	keep	off
foot	has	kind	on
for	hat	knew	one
found	have	knife	only
freeze	having	laid	our
fresh	he	large	out

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own	shoe	the	we
paper	shut	theater	well
pencil	sick	them	went
pink	sister	then	were
push	sit	these	west
put	six	they	what
read	sky	this	white
red	snow	three	who
road	so	time	will
root	soap	to	wind
rose	store	told	window
round	story	took	word
run	study	top	would
said	tail	two	write
saw	take	under	writing
say	teeth	up	wrote
school	ten	us	yes
seed	than	was	you
seven	thank	wash	young
shall	that	water	your
she			

(Third Grade)

342 words

about	almost	April	bath
above	along	around	because
across	always	arrest	become
act	animal	attend	behind
addition	answer	autumn	beneath
afraid	answers	avoid	beside
again	any	baby	between
all	anything	back	big
alley	appear	banana	bite
allow	apple	barn	blossom

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board	common	farther	June
born	company	feel	July
bottom	control	fellow	just
bought	cook	field	kill
branch	corner	fierce	kitchen
break	cotton	figure	knee
breakfast	cough	floor	knock
breath	cousin	flour	knot
broke	daily	fond	know
brown	danger	fortune	lady
build	date	friend	last
built	daughter	fruit	laugh
bundle	deserve	gave	learn
bury	die	glad	leather
busy	dinner	good-by	leave
butter	dish	grade	left
button	divide	grain	lemon
cake	double	grocery	lightning
car	drive	hall	like
caught	duty	heavy	listen
center	earn	herself	little
chase	earth	hold	live
child	eat	hole	look
children	egg	hoarse	lose
chimney	else	honest	lot
circle	empty	hope	loud
city	end	hour	love
clean	enough	hundred	low
climb	except	inch	machine
close	excuse	inquire	many
cloth	explain	intend	mark
coarse	fail	iron	master
color	family	island	measure
coming	farm	jail	meat

mice	often	reach	sorry
might	old	ready	south
mile	once	recess	speak
milk	open	remember	spell
minute	orange	ribbon	spring
miss	other	ride	stand
mistake	ought	right	star
mistress	over	ring	stay
Monday	pair	room	still
money	parlor	rough	stood
month	part	running	stopped
morning	party	safe	street
move	people	Saturday	sugar
much	perhaps	scissors	suit
music	pick	see	summer
must	picture	sell	sun
myself	pie	send	Sunday
name	piece	sent	supper
naughty	place	September	sure
need	plain	severe	swim
news	play	snake	table
nickel	pleasant	ship	talk
night	point	short	taste
ninth	poor	should	teacher
noise	pound	show	tell
noon	pretty	side	themselves
north	prompt	sing	there
nothing	quart	sleep	thing
notice	quarter	sleigh	think
now	quick	small	third
nut	quiet	sold	thought
obey	quite	some	thread
o'clock	race	something	threw
October	raise	soon	through

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throw	ugly	way	with
Thursday	uncle	wear	without
tire	until	week	woman
tired	upon	wet	whose
to-day	use	wheel	wood
toward	used	when	work
town	vacation	where	worth
traction	very	whether	wrap
tree	voice	which	wrapped
truly	wagon	while	written
truth	wait	whisper	yard
try	walk	whistle	year
tried	wall	whole	yellow
Tuesday	want	why	yesterday
turn	warm	winter	yet
twelve	watch	wish	

(Fourth Grade)

216 words

able	breathe	collar	escape
account	burglar	corn	expect
ache	bushel	cottage	failure
according	cabbage	country	fashion
age	canoe	dentist	fear
alarm	capital	depot	feather
allowed	carriage	desert	felt
angel	chain	discover	fight
attack	chocolate	dismiss	finish
author	circus	ditch	fire
beginning	civil	division	food
believe	class	dream	form
biscuit	club	engine	forward
blanket	coffee	enjoy	furnace

furniture	metal	pumpkin	station
grammar	middle	quarrel	stone
guard	mind	question	stop
guide	mine	rain	straight
gun	mischief	rapid	strong
hammer	most	reason	such
healthy	mountain	receive	sweep
heat	neighbor	recent	taught
history	neither	regard	teach
hoping	ninety	remain	term
human	number	roar	thick
idea	orchard	roof	those
important	outside	same	though
Indian	palace	saucer	thousand
inside	parade	scholar	throat
justice	park	second	thunder
kept	pass	seem	together
king	past	sentence	to-morrow
labor	pay	separate	tongue
land	peace	set	too
lawn	period	several	track
life	piano	shadow	train
light	pigeon	sew	travel
lying	please	shore	trial
line	pleasure	shoulder	trip
linen	pledge	since	trouble
lonesome	pocket	sir	umbrella
manage	poem	skin	unless
man	poison	slide	village
March	police	smoke	visit
market	post	soldier	visitor
matter	potato	son	waist
may	practice	stairs	war
mean	present	start	weather

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weigh	won	wonderful	wreck
win	wonder	world	wrong
women			

(Fifth Grade)

164 words

address	collect	fever	nature
afternoon	column	fifth	nephew
against	comfort	finger	none
agreeable	concern	forest	November
already	concert	frightened	object
although	couple	glass	occupy
angry	course	government	ocean
anxious	court	handkerchief	opinion
army	cushion	heaven	orphan
arrival	damage	height	ourselves
article	dangerous	hospital	page
attention	debt	instead	passenger
automobile	defeat	interest	person
auto	describe	jealous	persuade
awful	destroy	journey	picnic
bathe	different	judge	pin
beat	direction	language	plant
beautiful	disappoint	lawyer	position
bicycle	dispute	length	pour
birth	doubt	level	press
blow	edge	loose	price
bruise	equator	mail	problem
business	everything	match	promise
carpet	exercise	maybe	proper
cause	expense	medicine	railroad
cement	familiar	merely	rather
chance	famous	modern	real
coast	favorite	narrow	reply

rise	settle	suggest	usual
river	shepherd	supply	vegetable
roll	sight	suppose	view
saddle	sincerely	surprise	wake
sail	size	tear	waste
scratch	song	telegraph	wave
sea	square	terrible	weak
secret	state	Thanksgiving	Wednesday
section	steal	ticket	wide
select	stock	to-night	within
sense	strange	true	wound
serious	succeed	union	woolen
serve	success	useful	

(Sixth Grade)

135 words

absent	calendar	factory	material
accept	captain	favor	mere
acquaintance	catalogue	finally	museum
advantage	certain	foreign	national
advice	charge	freight	necessary
altogether	citizen	further	newspaper
appetite	clear	general	note
application	climate	genuine	oblige
arrival	coal	glorious	occasion
assist	contain	guest	odor
assistance	decision	imagine	office
attempt	diamond	immediately	order
avenue	dictionary	importance	parentage
baggage	difference	impossible	particular
balance	due	innocent	patient
breast	during	jewel	pavement
brief	entertain	least	peculiar
cabin	extreme	luncheon	physical

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pity	rate	search	temperature
plan	really	season	their
plenty	receipt	sheriff	thermometer
political	refer	shine	thin
possible	relief	sign	thorough
power	repair	silver	trust
prefer	report	special	unable
principal	request	spend	understand
principle	restaurant	spoil	variety
print	result	spread	valuable
prison	return	steady	volume
private	review	stomach	wander
punish	route	strength	weight
purpose	scene	student	wife
pursue	scenery	telephone	wire

(Seventh Grade)

96 words

accident	catarrh	deal	issue
acknowledge	cemetery	death	judgment
advertise	century	decide	knowledge
amount	character	desire	license
apply	check	disappear	manufacture
appoint	college	distance	marriage
appreciate	command	education	mention
arrange	committee	effect	minister
arrangement	complete	effort	moment
association	compliment	experience	mortgage
assure	conduct	gymnasium	nuisance
bargain	consider	honor	obtain
benefit	continue	illustrate	offer
bouquet	convenient	information	opportunity
campaign	criticize	interrupt	opposite
candidate	cylinder	invitation	perfect

personal	recommend	service	subject
physician	reference	signature	sufficient
practical	relative	similar	superintendent
prairie	religion	single	system
preparation	remark	sleeve	tariff
prepare	remedy	society	therefore
privilege	salary	sole	usually
recognize	secretary	splendid	yield

(Eighth Grade)

14 words

affair	forenoon
allege	member
argument	proceed
attendance	public
camphor	secure
corpse	treasure
department	vacant

The foregoing list of words is not meant to displace the Spelling Book. It is rather a scale by which to measure the content of the book. **Purpose of the List**
 These words are not all the words which a book should contain, but a book should certainly contain all these words.

This list may be used to very practical ends in the latter part of the year by every teacher of spelling. It can be used, also, as the basis for Friday afternoon spelling matches. The lists of words for special tests may be taken from it. The children may be given the list and told that when they have completed the eighth grade, this is the smallest

number of words that they should be able to spell correctly, without even having to think about the order of the letters.

The teacher should give written tests including a large number of words to discover those words which the children cannot spell. To have the child use the words in sentences is preferred to mere list spelling. When the teacher has discovered the troublesome words, and when the child is made aware of his own limitations, then some definite teaching and careful and persistent study may be done in connection with the words that are misspelled. A child should not be required to study words that he already knows, but rather those words that he cannot spell. Thus, there will be motive for study and pleasure in the work, for the child himself will see the necessity for and benefit of his study.

The testing should begin with the words suggested for the grades below that in which the child is located, and should work up to his present classification. He will discover the words that he should know but does not. When these are discovered, the teacher should work with the child according to the methods of teaching discussed earlier in this book. It is believed that if the teacher will devote about a month at the close of each year to such work as is here suggested, the results will amply repay her for the time spent.

The inter-school written and oral spelling match,

discussed in a later section of this book, is one of the best means by which to motivate good work and is valuable for the purpose of reviewing the work of the year and fixing definitely in the minds of the children those words that everyone should know how to spell automatically.

SUMMARY

Many scientific investigations have been made in connection with spelling. In this chapter we have discussed two of those that have resulted in special lists of important words :

1. We have discussed Dr. F. Jones' list, commonly known as "One Hundred Spelling Demons," because it includes words that are frequently used and most often misspelled.

2. We have discussed H. C. Pryor's "A Suggested Minimal Spelling List," because it has been compiled from a number of other reputable lists.

Such lists as the two discussed in this chapter should be used by the teacher as guides to direct her effort. They may also be used by the class for purposes of review.

QUESTIONS AND EXERCISES

1. What phase of the study made by Jones interests you most? What surprises does it contain for you?

2. Test your school by means of the "One Hundred Spelling Demons" to see if the results justify this name for those words.

3. Does Pryor's "A Suggested Minimal Spelling List" contain all the words which you think such a list should contain? Wherein does it seem most limited? What

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method would you use to determine what words should be added?

4. How do you account for the fact that there are so many words in the lists for the lower grades and so few in those for the higher grades, in the Pryor List?

5. Compare the words assigned by Pryor to some one grade with the words listed in your adopted text for the same grade. To what extent do the two lists agree?

CHAPTER V

SPELLING LISTS MADE BY THE SCHOOL

IMPORTANT as are the words that are found in a good spelling book and important as are the words that are presented in any of the well-known spelling lists, the teacher must bear in mind that they do not include all the words that her children need to know how to spell. Obviously no spelling book would contain very many local words unless it were one meant purely for local use. But no ready-made list will serve the teacher and the school nearly so well as will a list which the school itself makes.

The original lists may be of different kinds and may have a variety of purposes in addition to the purpose of teaching spelling.

The first and most important original list is that which each child makes for himself. This may include words which he finds difficulty in **Original** spelling, words which he is adding to his **Lists** vocabulary, words with certain peculiarities, and words that are names of types of things in which he is interested.

Next in importance is the Class List or the School List which represents some special interest of the

group for a particular time. This list should be made under the white heat of enthusiasm in some specialized interest. There should be a fixed time at which the list must be completed. Some particular phase of the subject should be considered each day. All members of the class should contribute to the list. For a time the regular spelling assignment for each pupil should be to bring to class as many words as possible bearing upon the subject. When the lists have been completed, then there should be a season of memorization and testing. The best way, perhaps, to secure the maximum of interested attention and at the same time to provide for repetition, so necessary in spelling, is to review the work in a spelling bee at the close of the special study.

Through such a Class or School List, any special interest of community, county, or state may be studied. The aim should be very definite in order to get the best results.

The rural training schools connected with the Oregon Normal School, while under the direction of one of the authors, made a Willamette Valley Spelling Book. The purpose of this book was to see what agricultural words were needed particularly by the farmers of that valley. A similar experiment has been conducted in Brown County, South Dakota, in connection with the supervision of rural schools.

THE BROWN COUNTY SPELLING BOOK

During the month of December, 1919, sixteen schools undertook to make a Brown County Spelling Book. Ten days were set aside for collecting the words that related to ten different subjects of special interest in Brown County. After the words were collected, the pupils were allowed ten days in which to learn them in preparation for a big spelling bee held in the town of Warner on December 19. Those words are given below, not because they are of any special worth to those living outside Brown County, but to illustrate how this type of work may be done.

The children spelled the words and then used them in sentences which stated actual facts. Suggestive sentences and phrases are given with the words under the first topic to show how this work was done. The reader will see how similar sentences could be made in which all the other words of the list might be used.

No. I. — Words and Phrases Dealing with the History of Brown County and South Dakota

1. Clarence Johnson . *Clarence Johnson* was one of the first settlers of Brown County.
2. William Young . . *William Young* was his friend.
3. Hattie Young . . *Hattie Young* was the sister of William Young who came with him.
4. frontiersmen . . . They were good *frontiersmen*.

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5. Missouri River . . . The *Missouri River* is the largest river in *South Dakota*.
6. trail They came along the old *trail*.
7. Fort Pierre . . . *Fort Pierre* was the first fort built in the state.
8. Fort Sisseton . . . *Fort Sisseton* was another well-known fort.
9. Military Road . . . *Military Road* is another name for the old trail.
10. first home The *first home* in South Dakota was a log cabin.
11. established Ordway was *established* in 1887.
12. parallel } The *forty-sixth parallel* crosses
13. crosses } the county.
14. log cabin } The early *settlers* lived in *log*
15. settlers } *cabins*.
16. accident They suffered no *accidents* during the first year.
17. incident There were no unusual *incidents* during the year.
18. plow A *plow* was used in Brown County in 1880 for the first time.
19. James C. Lindboe . *James C. Lindboe* is the name of the first child born in the county.
20. dugout He lived in a *dugout*.
21. public meeting . . The first *public meeting* was held in Brown County on July 4, 1879.
22. post office The first *post office* was established at Columbia.
23. Columbia *Columbia* is the site of the first post office in the county.

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24. James Humphrey . . . *James Humphrey* established Rondell in 1880.
25. Brown County . . . *Brown County* is a county in the state of South Dakota.
26. organized It was *organized* in 1880.
27. election The first *election* was held in 1880.
28. Brown Brothers . . . *Brown Brothers* owned the first automobile in the county.
29. automobile We have thousands of *automobiles* now.
30. Mr. Baird *Mr. Baird* owned the first airplane in the county.
31. airplane We shall all have *airplanes* soon.
32. Thomas A. Boyden *Thomas A. Boyden* was the first merchant in the county.
33. oxen *Oxen* drew the first wagon that came to the county.
34. population The *population* was 25,786 for the county in 1910.
35. Ordway *Ordway* was one of the important towns of the state in early days.
36. Aberdeen *Aberdeen* is the best town in the state, we think.
37. railroad The C. M. & St. P. is our most important *railroad*.
38. Chicago *Chicago* is the commercial center of the Middle West.
39. Milwaukee *Milwaukee* is a famous city.
40. Saint Paul *Saint Paul* is one of the twin cities.
41. James River *James River* is the only river in this county.

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42. Mistress Seaman . *Mistress Seaman* was one of the first teachers of the county.

No. II. — Words and Phrases Dealing with Brown County Soil

- | | |
|---------------------|------------------|
| 1. black loam | 9. stratum |
| 2. sandy loam | 10. strata |
| 3. gumbo | 11. agricultural |
| 4. glacial deposits | 12. fertile |
| 5. gravel | 13. alkali |
| 6. productive | 14. porous |
| 7. clay | 15. valuable |
| 8. subsoil | |

No. III. — Words and Phrases Dealing with Brown County Crops

- | | |
|--------------|------------------|
| 1. wheat | 14. beans |
| 2. oats | 15. pumpkin |
| 3. corn | 16. squash |
| 4. barley | 17. carrot |
| 5. spelt | 18. peas |
| 6. millet | 19. onion |
| 7. alfalfa | 20. timothy |
| 8. forage | 21. brome grass |
| 9. Dent corn | 22. pigeon grass |
| 10. rye | 23. clover |
| 11. flax | 24. sweet clover |
| 12. potatoes | 25. foliage |
| 13. beets | 26. tomatoes |

No. IV. — Words and Phrases Dealing with Crop Pests in Brown County

- | | |
|--------------|---------|
| 1. hot winds | 3. smut |
| 2. rust | 4. hail |

- | | |
|------------------|----------------------|
| 5. gopher | 15. wild mustard |
| 6. squirrels | 16. sunflowers |
| 7. grasshopper | 17. Canadian thistle |
| 8. crickets | 18. drought |
| 9. cut worms | 19. fungi |
| 10. potato bug | 20. mildew |
| 11. potato scab | 21. potato blight |
| 12. cabbage worm | 22. Hessian fly |
| 13. quack grass | 23. tumble weed |
| 14. wild oats | 24. mortgage |

No. V. — Words and Phrases that Relate to Some Allies of
Brown County Farmers

- | | |
|--------------------|-----------------------------|
| 1. hawks | 16. snake |
| 2. meadow larks | 17. toads |
| 3. robins | 18. bacteria |
| 4. magpies | 19. inoculate |
| 5. swallows | 20. Bordeaux mixture |
| 6. thrushes | 21. formalin |
| 7. flickers | 22. fungicide |
| 8. pheasant | 23. humus |
| 9. prairie chicken | 24. Paris green |
| 10. pollen | 25. cow testing association |
| 11. bees | 26. parcel post |
| 12. ants | 27. split log drag |
| 13. cats | 28. snow |
| 14. dogs | 29. rain |
| 15. foxes | 30. sunshine |

No. VI. — Words Dealing with the Pure-bred Animals and
Fowls in Brown County

- | | | |
|-------------------|-----------------|---------------------|
| 1. <i>Horses:</i> | 2. <i>Hogs:</i> | 3. <i>Chickens:</i> |
| Percheron | Poland China | Plymouth Rock |
| Belgian | Berkshire | Wyandotte |

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- | | | |
|--------------------|---------------------|-------------------------------|
| 1. <i>Horses :</i> | 2. <i>Hogs :</i> | 3. <i>Chickens :</i> |
| Clydesdale | Duroc-Jersey | Rhode Island Red |
| thoroughbred | Chester White | Orpington |
| mule | Yorkshire | Leghorn |
| | Hampshire | Buff Cochin |
| | | Langshan |
| 4. <i>Cattle :</i> | 5. <i>Turkeys :</i> | 8. <i>Descriptive words :</i> |
| Durham | a. black | draft |
| Shorthorn | b. bronze | roadster |
| Hereford | | dual purpose |
| Guernsey | 6. <i>Geese :</i> | hardy |
| Holstein | a. Toulouse | rustler |
| Brown Swiss | b. African | docile |
| Galloway | | vicious |
| Aberdeen | 7. <i>Ducks :</i> | gentle |
| Angus | a. Pekin | sensible |
| Ayrshire | b. Indian | prolific |
| Holstein- | Runners | stubborn |
| Friesian | | milch |
| | | beef |
| | | pedigreed |

No. VII. — Words and Phrases Relating to an Up-to-date Brown County Barn

- | | |
|-----------------------|---------------------------|
| 1. electric lights | 10. silo |
| 2. water system | 11. ensilage |
| 3. stanchion | 12. automatic water bowls |
| 4. cement floor | 13. salt dishes |
| 5. hay sling | 14. ventilation |
| 6. elevator | 15. light |
| 7. electric currycomb | 16. granary |
| 8. feed bins | 17. tool shed |
| 9. cupola | 18. haymow |

No. VIII. — Words and Phrases Relating to an Up-to-date
Brown County Farm

- | | |
|---------------------|-------------------------|
| 1. garage | 22. fertilizer |
| 2. Ford | 23. barnyard manure |
| 3. electric motor | 24. mulch |
| 4. gravel roads | 25. farm accounting |
| 5. cement walks | 26. insecticide |
| 6. artesian well | 27. legumes |
| 7. water system | 28. Babcock milk tester |
| 8. pressure tank | 29. balanced ration |
| 9. machine shed | 30. germination test |
| 10. ice house | 31. silage |
| 11. shredder | 32. tile drain |
| 12. harvester | 33. garden |
| 13. gasoline engine | 34. brooder |
| 14. horse power | 35. bulletins |
| 15. kerosene | 36. candling eggs |
| 16. cultivator | 37. college extension |
| 17. header | 38. conservation |
| 18. binder | 39. county agent |
| 19. formaldehyde | 40. diversified farming |
| 20. irrigation | 41. bank credit |
| 21. rotation | |

No. IX. — Words and Phrases Relating to an Up-to-date
Country Home

- | | |
|---|-------------------------|
| 1. furnace | 8. porcelain bathtub |
| 2. electric engine | 9. sun porch |
| 3. telephone | 10. piano |
| 4. sewer system | 11. victrola |
| 5. septic tank | 12. indoor toilet |
| 6. electric washer, fan,
iron, stove | 13. motor power |
| 7. cement basement | 14. Rural Free Delivery |
| | 15. running water |

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- | | |
|-------------------------|------------------------|
| 16. linoleum | 22. vacuum cleaner |
| 17. standard pictures | 23. ventilation |
| 18. newspapers | 24. flowers |
| 19. "Farm Journal" | 25. balanced meals |
| 20. "Good Housekeeping" | 26. kitchen accounting |
| 21. County Health Nurse | |

No. X. — Words Relating to an Up-to-date Brown County Community

- | | |
|-------------------------|-----------------------|
| 1. community church | 8. brass band |
| 2. consolidated schools | 9. Boy Scouts |
| 3. coöperation | 10. Camp Fire Girls |
| 4. fairs | 11. traveling library |
| 5. housekeepers' club | 12. grange |
| 6. literary society | 13. motor bus |
| 7. choral society | 14. Farm Bureau |

We have heard a good deal about spelling being taught incidentally with other subjects, but we have heard practically nothing of other subjects being taught incidentally with spelling. A perusal of the foregoing list will show just how many other subjects can be taught incidentally with such a homemade list of words as the above. One farmer remarked: "I have had at least one child in the school each year, for four years now, who was supposed to study agriculture out of a book, but they have learned more agriculture in the last ten days and taught me more than we all have learned in the previous four years." Another farmer said: "Say, Mister, my

Value of
the List
in Moti-
vation of
Other
Work

youngsters haven't been studying at home for a long time. I supposed that it had gone out of style to study at home o' nights any more like they used to in the old days, but bless my life if it hasn't come back with a whiz since you have been making that Brown County Spelling Book. Why — they have rooted through all of the old farm journals that have been lying around the house for years. The first time the library's been opened in years was this week. Those youngsters keep me and the Missus ransacking our brains to recall what happened when we first came to this county twenty-five years ago." Another farmer said: "Say, what are you trying to do? Put the city in the country? Since my chaps have been making that Brown County Spelling Book they tell me twenty times a day that something around here is not up to the twentieth century standard."

The above illustrations are sufficient to show how the simple work of the spelling class had influenced the life of the home. The parents were participating actively in the work of the school. Home life, agriculture, social activities, history, geography, morals, etc., were being taught in connection with the making of a mere list of words to be used in a spelling match.

This idea is capable of almost limitless application. Geography, history, industry, home life, church life, community activities, and many other

subjects could be studied in an introductory or review fashion in connection with spelling.

To illustrate the use to which such work can be put, suppose a teacher in the state of Maine were to say to her spelling class: "For to-morrow, I want you to bring to class the names of all the rivers in the state that you can find." Among the words would be Penobscot, Kennebec, Androscoggin, Allagash, and Saco. For the pupil to study the words in this way would be vastly better than for the teacher to choose those same words from a regular spelling book, or for her to pick them out of the geography. The children like to contribute to the list by their own efforts and when this is done in pursuance of some object in which they are interested, they have two interests that lead them on instead of one.

This type of spelling work should come as a change, a vacation from regular spelling work with the book. About one month out of the year could be devoted profitably to work of this sort.

SUMMARY

The spelling lists which the teacher and the children compile for themselves can be made of incalculable worth. The lists that the child makes of the words which he misses from day to day, the lists that he makes in which he groups words with common characteristics, or of words that relate to one of his special interests, are for him the most important kinds of lists.

In this chapter the attention has been directed to a list that was made by the children in a certain selected district of Brown County, South Dakota, during the year 1919-20. We give this as a type. Such a list can be made by any teacher and group of children in any locality. Such a study will provide an opportunity to familiarize the children with some phase of life in the community in which the school is located, and will help them to learn to spell the words common to that locality.

QUESTIONS AND EXERCISES

1. Have all of the children of your school make individual lists of all the words they miss during one month. How many words are common to all the members of each class? To any two classes? To the entire school? What conclusion do you make from the results of the comparisons?

2. What one interest in your community could be studied most effectively according to the plan used in the Brown County experiment?

3. Check the Brown County list to see what words in it should become a part of the permanent writing vocabulary of your pupils. If you had been one of the teachers in the experimenting group, how would you have dealt with the words which you did not consider valuable as a part of the writing vocabulary?

4. Would you justify the making of such a list purely on the basis of its worth in fixing habits of spelling? Why?

CHAPTER VI

DEVICES FOR TEACHING SPELLING

IN Part I of this book we discussed some of the psychological principles underlying the teaching of spelling. There are other psychological factors, though, that must be recognized and borne in mind. We wish at this point to call the attention of the teacher to the factors that relate to the child's love for play and his responses to others in his group.

One of the original tendencies of man is to play. He may play with things or persons. He gets pleasure out of things if he can manipulate them, change them, build them up, take them apart, rearrange them, destroy them. He gets more pleasure out of persons because his play nature is given larger scope. He may tease, bully, or submit to a person. He may compete with and master a person. His desire for companionship, his pleasure at doing what he sees others do, his satisfaction at seeing his own accomplishments imitated by others, are all given exercise when he is associated with persons. Practically all the devices that are included in this book are based upon these psycho-

logical characteristics in man : his love for manipulation, association, and competition.

The child's nature is the nearest approach we have to the original nature of man. The child spends practically all his life in play till he enters school. In the past we have too often felt and have made the child feel that all play must stop when he enters school. When we insist upon this, we are trying to dam up a channel which the ages have dug.

Psychologists tell us that there are three ways with which to deal with original tendencies : (1) crush them, (2) direct them into new channels, (3) develop them. There are practically none of man's original tendencies and instincts that we should crush. There are many that we should develop and many that we should guide into new channels. Play is one of the tendencies that should be guided into right channels and cultivated to produce the best results. Children get their clearest initial impressions, do their most attentive work, repeat action or speeches more often with interested attention, and apply what is learned more quickly and with more satisfactory results when they are playing than at any other time. This is our only excuse for introducing the following games and devices into a book that is designed as a scientific inspiration and a practical help to teachers of spelling. Our one word of caution is that the teacher must

not make the game her hobby. She must not feel that there should never be a time when the children are asked to take work as work. She should rather feel that the game is a sort of rest from work. Play itself would lose its meaning and pleasure if all life were play. "Moderation in everything," then, should be the teacher's aim.

Small children are very fond of pictures. They like to construct things. They like to collect things.

**Picture
Repre-
sentations** They like to give to inanimate objects characteristics of animate objects. Their books, pictures, and playthings are to them almost what persons are to older people. For these reasons, the following devices are good in the lower grades.

Take a picture of a house, barn, yard, field, apple, peach, leaf, tree, or any other object that will suggest to the pupils a number of associated words. Write the words within the outer border of the picture and have the pupils study from this. Use the picture at the recitation time. The children may make the drawing after the class for seat work and write in the words as a penmanship lesson.

This device could be extended by not having any particular list of words, but by merely putting the picture on the board. Then have the children prepare the list of words that the picture suggests. They may bring them to class. For the first recita-

tion, the class listens to the reading of the various lists. They hear each child spell his list of words. If any words have been misspelled, these should be memorized in their proper form for the next lesson. The picture may be kept on the board until the list of words has been completely learned.

Special spelling booklets may be made for the various months or seasons of the year. These books should contain the words that have been spelled during the period and the cover design should be one appropriate to the month or season. The cover should be the product of the child's own originality and creation. This will serve to stimulate and motivate not only the work in spelling but that in drawing also.

VISUALIZING

In Part I, we have already emphasized the importance of having the child learn through as many senses as possible. It was also pointed out that the most important of these senses in learning to spell is the sense of sight. Practice, therefore, in visualizing the words needs to be given to the children. Here are some devices that are usable for this purpose. The teacher can improvise others if she desires.

1. Write the words on the board very plainly. Have the children spell the word letter by letter. Then have the children close their eyes. As each

child is tapped on the head, he gives the letter that is needed until the word being spelled is complete.

2. Write the words on the board. Have the children look at them. Then direct the children to rest their heads on their desks with their eyes closed. Cover a word or erase a word and ask the children to look up and spell the word that is missing.

3. Assign a number of words for the lesson to be learned. When the lesson is prepared, have one or more of the children go to the board and write a certain number of the words. Have those who remained at the seats go to the board and write all the words which the first group failed to write. If the lesson is short, all members of the class might be sent to the board at one time. To reproduce a list of words without a book calls for clear and effective visualizing.

4. To build words on a given stem or with a certain initial or final letter or syllable calls for good visualization. Take such a syllable as *an*, *am*, *ail*, *ful*, *ly*, *con*, or *ex*, and see how many words can be built upon it within a certain number of minutes. If the work ends at this point we have a language lesson and not a spelling lesson. Of the words thus built we should select the misspelled ones for the next lesson.

GUESSES

Children like to guess. "Guess What" is one of their favorite games. This can be used to good

effect in school. It calls for clear visualization and it secures attentive, interested repetition. The following two illustrations show how this may be done:

1. The lesson consists of six words: kitchen, sugar, kettle, stove, fire, candy. Sue is selected as the leader. She stands and says, "Jane, I am thinking of a word." Jane rises and says, "Is it k-e-t-t-l-e, kettle?" Sue replies, "It is not k-e-t-t-l-e, kettle." John rises and says: "Is it c-a-n-d-y, candy?" Sue says: "Yes, it is c-a-n-d-y, candy." Then John becomes the leader. Thus the words may be gone over a number of times until they are well learned.

2. The next device is just a slight variation of the one given above. Suppose there is a longer list of words, the same group of children, and the same goal in view — drilling upon the group of words until the spelling of them becomes automatic. In this case the child leading would say, "I am thinking of a word that begins with f." Some one would rise and say, "Is it f-i-r-e, fire?" The leader would then reply, "Yes, it is f-i-r-e, fire." This device should be used only when the list is much longer than in the ordinary lesson, for the beginning letter is such a good cue that the word in question would be guessed the first time and thus prevent the desired amount of drill. This device is good for a weekly or monthly review.

REWARDS

The question of rewards for school work has ever been a mooted one. It is now quite generally agreed that rewards that have a money value in themselves should not be given for excellence in ordinary school work. But we must all realize that all work is done for some sort of reward and whatever reward is offered should be such that each member of the class has a chance to secure it. The reward that is most potent in its influence upon conduct and effort is perhaps that which we receive in the form of appreciation or approval from others. Here again we find the original instincts or tendencies manifesting themselves — the instinct of appreciation of the approval of others and the instinct of love of superiority over others and a recognition by others of that same superiority. We give below a few illustrations of devices that make use of these original tendencies to a limited degree :

1. The teacher draws a picture of a large pumpkin, watermelon, apple, peach, pie, or other object, on the board. She indicates that it is divided into pieces. On each piece of the object pictured she writes some word of the lesson. The game is to see who can spell all the words. Every child who spells correctly all the words in the lesson gets one of the pieces with his name written on that piece.

2. One of the oldest and most common rewards for class excellence is the custom of giving honor marks to a child who stands at the head of his class for one recitation,

or more, according to agreement. The chief weakness of this plan is that it can, of course, be used only for oral spelling work.

3. Another form of reward that appeals to children in the elementary grades is to award stars to them for a certain degree of excellence. White stars may be put by the child's name for each perfect recitation; blue stars may be awarded for five perfect lessons; red stars for ten perfect lessons; and gold stars for twenty perfect lessons in succession. This device can be varied according to the teacher's desire and the situation in her own school.

4. To write on the board, at the end of the week, the name of each child who has made a perfect record for the week is a good stimulus.

5. Very closely akin to this is to have an honor roll for the month and to publish in the local paper or in the school paper the names of all children who have attained a certain record during the specified time.

6. Another plan that is sometimes used with effect is the class honor badge made of aluminum or some other metal on which is written the words, "Champion Speller." When a child has been the champion for a week he is permitted to wear the badge until the new champion is declared.

OLD GAMES

The devices thus far discussed have been such as to apply more particularly to the work with smaller children. Much of this work has appealed to the individual only. But as children grow older they become more gregarious. They form cliques, groups, gangs, and clans. They like to play and to fight in groups. To get the best individual effort from

them, the appeal must be made to the group consciousness and spirit. Their games on the playgrounds are such as are played by one group matching its wit and strength against the wit and strength of the other group. The games of the school work should be classed according to the same principle. The games adapted to spelling which are suggested here do not call for a group against a group, but they all involve group activities.

The children are lined up in one row for the game. The teacher gives each child two words. All who
Checkers spell their two words correctly move one place to the next station. Those who do not spell both words correctly must wait one more turn before they are permitted to move. There are four stations in the game from the time the child starts till he gets back home, — his own desk. That is, each child must spell at least eight words. The poor speller spells more; the more poorly he spells, the more turns he has. This is the great advantage of this game — practice is given where practice is needed.

Into a box (a pool) are placed the words that are to be spelled. Each child takes his turn at fishing
Fishing for a word. He catches one and hands it to the teacher. She pronounces it to him. If he writes it correctly, it becomes his fish; if not, it is the teacher's fish. It is saved and he is taught the word. The game is to see who can get

the greatest number of fish. If the children are small, this game may be adapted and called "Jack Horner's Pie."

The children all stand at their seats. One child is designated as Puss. The teacher gives out words to the children in their turn. Each child spells his word if he can. If he misses, then Puss has a chance to spell it. If Puss succeeds, she takes his station and the one missing the word becomes the Puss.

**Puss
Wants a
Corner**

Very similar to "Puss Wants a Corner" is "Mushpot." The children form a ring. One child is put into the pot. When some one misses a word, the one in the mushpot spells it. If he spells it, he takes a place in the ring and the one missing it takes the place in the mushpot.

Mushpot

During the winter the snowball is a good device. Draw a picture of the snowball with a child pushing it. The words of the spelling lesson are written on pieces of paper. They are divided among the children. When they are spelled, then they are pinned on the snowball. This is called "rolling the ball." When all words are on it, then they begin to "unroll it" by taking the words off and spelling them as they come off. When they are all off, the ball is melted.

**Making
the Snow-
ball**

This is a game that all children enjoy because they like to imagine themselves traveling. It is played

by appointing a number of ticket agents to represent the different cities that the children decide to visit on that particular trip. Each agent **Seeing the World** is provided with a number of words which the children must spell before they can board the train or boat and get away from that city. This is another good game for a monthly review lesson.

The best game of all, perhaps, for the children in the grammar grades is the game of baseball. It is **Baseball** played just like ordinary baseball. The captains of the teams choose batters. The teacher serves as scorer and umpire. The names are written down in the order chosen. Nine vertical columns are placed beside the names of each team. These represent innings. The teacher, or some one else, "pitches" words to the batter. If he hits three times he goes to first base and is succeeded by another batter. Each time that a man goes around the bases, he makes a score for his team. If he misses a word when it is given him, the catcher spells it. Then he is out. When three men are out, the other side takes the bat.

SPELLING MATCHES

No device for review has been found that excels the old-fashioned spelling matches. These are based on the group spirit and the instincts of rivalry and mastery. There are many forms that the match

may take. We give below a few of the more common forms :

Two captains choose the spellers. The teacher gives out the words. If any one misses a word, he sits down. The side that has a member standing when all members of the other side have been seated is the champion.

**The
Common
Match**

The weakness of this plan is that the poorest spellers are seated first.

Sides are chosen just as in the common match. The teacher gives out the words just as in the other plan. The difference is that in this plan, when the word is missed, the teacher makes no indication to the class of that fact. If a pupil standing in line notes that the word is missed, he may spell it, and then all on the opposing side who have let it pass must be seated.

**The Catch
Match**

In this plan, the game is to see who can make the highest score. No one is seated till the game is over.

One hundred points or any other number of points agreed upon may constitute a game. Under this form, the pupils on each side must spell the words that are given to them by the other side. If they spell each word that is given, they make one point ; if they fail to spell the word, the side that gave the word must spell it. This would give the side that gave and spelled the word one point for spelling it ; and since the word was missed by the other side, the side which gave the

**The Score
Match**

word receives as many points as there are letters in the word. Illustration: John gives Jack the word "Constantinople." Jack misses it. John then must spell his own word. If he does, he gets one point for spelling it and fourteen points because the other side missed it, making in all fifteen points.

The game here is to see if one side can trip the other in the correct spelling of words that have the

Homonym same sound but have a different meaning.

Match This is a contest in points — ten making a game. If the child on one side misses, the next child on the giving side must spell the words. If these words are spelled correctly, the side gains two points or as many points as there are homonyms. If less than ten points are made by one side, then the side having the larger number of points at the close of the lesson is the winner. Illustration:— Mary says to Jack: "Jack, I have *two* rabbits. Mother says that is *too* many. I am going *to* sell them." Jack gets his words confused. Susan, who is next on Mary's side, takes up the task and spells them all correctly and shows that she knows which word belongs in which place. She thus gains three points for her side, not because she spelled them and applied them correctly, but because the other side lost them.

The matches thus far described are oral matches, but oral matches, valuable as they are, have two

great weaknesses : first, they do not give practice in the kind of spelling — written spelling — which is used in everyday life ; second, the number of words spelled is very limited in the oral match. The child may fail to get the very word on which he should have practice. Written matches are, therefore, preferable in many ways. These may be arranged by rows in the schoolroom or by teams. The children may be sent to the board or they may spell at their seats. If they are sent to the board, their words can be seen better, errors quickly noted, individual weaknesses found, and words discovered by each child upon which practice is needed. The team that misspells the fewest words is winner of the match.

Opponents at the board. The teacher starts the match by giving out a word. The child who first writes the word correctly may choose the next two spellers and assign the word. The winner chooses the next spellers, and so on.

The teacher announces a topic. The teams begin and write as many words as they can which relate to the topic for the period of time allowed. When the time is up the number of words correctly spelled by the groups are counted. The side that has the largest number of correctly spelled words wins the match. The misspelled words are taken for a special drill lesson the next time.

The same game may be slightly changed by

taking a given letter, prefix, suffix, or other characteristic and forming words by using it.

The teacher will need to remember that games are the dessert and not the regular meal of the school-room. They will spoil the appetite not only for the substantial part of the meal, but also for the dessert itself if they are used overmuch or unwisely.

SUMMARY

Practically all principles are put into operation through some sort of device. The principles of teaching spelling are no exception to this rule. In this chapter we have discussed a number of devices that classroom teachers have found helpful. These devices have been classified in the following manner:

1. Picture Representations
2. Visualizing
3. Guesses
4. Rewards
5. Old Games
6. Spelling Matches

QUESTIONS AND EXERCISES

1. To what extent do the devices presented in this chapter "motivate" the study of spelling and to what extent do they "sugar coat" it? Justify or condemn with the best arguments you can present.

2. For what grades do you feel that each of these devices is best suited?

3. Try out in your school the various devices suggested. Which do you think will work with the greatest amount of satisfaction and why?

4. Can you take these suggested devices and improve upon them so that they will better suit the situation as it exists in your school? (Try this. Your pupils will be able to give many good suggestions.)

5. Of the forms of the written spelling match with which you are familiar, which one is best? Why?

CHAPTER VII

SOME QUESTIONS OFTEN ASKED BY TEACHERS

1. *I have a child in my school that cannot learn to spell. What shall I do with him?*

This is a problem that several persons have
The In- carefully investigated. The so-called in-
corrigible corrigible spellers fall into four groups
Speller and may be considered in that way.

First: There is the child that cannot learn. He does not have learning ability. The probability is that if he can learn anything he can learn to spell. If he cannot learn anything else, then you cannot expect to teach him spelling. He is mentally deficient and should be referred to the county superintendent, and the superintendent should see that the child is placed in the kind of school that provides for his needs. Your school does not. These children are not really problems for the average teacher because there are so few of them in school. The teacher should be very careful not to suggest that a child does not have the ability to learn. Be convinced before making such a declaration. When

you do make it, make it to the proper persons in order to secure aid for the child.

Second: There is the child who is physically handicapped. Four out of five among the children who have been carefully examined as "hopeless spellers" have proved to have defective eyesight. If the child has mental ability but is an exceptionally poor speller, you should have his eyes examined to see if they are not the seat of his difficulty.

Third: There is the child who has been poorly taught. He is lacking in precision and in spelling pride. There is nothing wrong with his mind except that it is the victim of bad habits. Your task, then, becomes one of breaking up old habits and establishing new ones that are correct. There is a tendency on the part of teachers to "cast stones" at their predecessors by blaming all of the weaknesses of the children upon former teachers. If the teacher finds a weakness in a child, she should glory in the opportunity that it provides for her to do a miracle rather than fret about the poor instruction that the child has formerly received.

Fourth: There is the child who is suffering from poor instruction at present. The probability is that such children form by far the largest of the four groups of poor spellers. If the child spells poorly, the probability is that the present teacher is failing to make the best use of materials and methods. The teacher should give her own work the closest

investigation. Is she failing to interest the child? Is the work too difficult? Is the material suitable for him? Is he properly classified? Has he lost faith in himself? Just what are his limitations? These are questions that the teacher should answer before she acknowledges that the child is a "hopeless speller."

2. *My pupils can spell correctly when they really try but in their written work they constantly make errors. They double the wrong letter, omit the final letter, exchange the position of letters in the word, and make a variety of other inexcusable mistakes. Why do they make these mistakes and how can they be corrected?*

The greatest difficulty with these children is that they do not have a spelling conscience. They must come to feel that to miss a word is to commit a real social offense. In order to produce this feeling among these children social situations must be provided. They can be provided by tying up the school life with the real life of the community. Friendly letters, notes of invitation, orders for merchandise, correspondence with children in neighboring cities and states, and with children in foreign lands will provide many opportunities to awaken children to a realization of the necessity for correct spelling. But they must come to feel that it is as important that all the words in their letters to close personal friends shall be

The
Careless
Speller

spelled correctly, as it would seem to them were the letter written to the President of the United States. Until they have developed this feeling, they have not developed a spelling conscience. They have a social conscience but not a spelling conscience. A spelling conscience will hurt them when they misspell a word, it matters not to whom or for what purpose that word is written. They must come to have a regard for the form of the word itself.

Together with the development of a spelling conscience must come the development of a consciousness on the part of the child as to when a word is correctly spelled and when it is not. With some attention to this phase, the child will soon come to know when a word is correctly spelled and when it is misspelled.

In order to train the children to notice errors, the teacher should require them to look over their written work and to mark all words that they know are incorrectly spelled and also those about which they are doubtful. Some acceptable symbol of marking the words should be adopted by the school.

After these doubtful and incorrectly spelled words have been marked, the pupil should look them up in the dictionary, put them down on his "black list," rewrite them correctly, and keep them for later drill. It is only by holding himself to strict account that the pupil can develop the consciousness of correctness or incorrectness in spelling. If he

is not strict with himself he will spell a word one way one time and another way the next, so that it will not be long until he will not know when it is wrong and when it is right.

In this situation, the problem is more serious than it would have been at the beginning. Here old habits must be broken and new ones formed. A careful study of the word, therefore, to see where the error occurs, a strong impression of the correct form, attentive repetition to stamp in the correct form and to break the incorrect bonds, and the determination of the teacher never to permit an exception until the new habit is firmly fixed, are the essential factors with which pupils and teacher must work in overcoming habits of incorrect spelling.

3. *What tests should be given in spelling? How should they be conducted?*

There are four types of tests, classified according to purpose. The preliminary test is a test given

<p>The Preliminary Test</p>	<p>before the words are taught to the children</p> <p>This type of test has two purposes. It seeks to find what children need most instruction and which words are most difficult to spell. The test should be given some time before the words are to be taught so that the impression of the words will have been erased before the time for the teaching. A record should be kept by the teacher of the percentage of the class who miss each word. This will reveal the relative difficulty</p>
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of the words. She should also keep a record of the percentage of the words missed by each child. This will reveal the individual need of the children. This preliminary test is used most in connection with the Test-Drill Method discussed in the chapter on Methods.

The test of teaching should come after the words for the day have been presented. It is the daily test of the teacher rather than of the child. The reader will recall the details of how the new words were taught under the Teaching-Study Method. The last part of the lesson, according to that method, is to have the children write sentences in which the words taught occur. If these words are correctly spelled, then, the teacher may feel that the teaching is satisfactorily done. If the children do not spell the words correctly in the first written application, the teacher must blame herself instead of the children. She must see what she has failed to do in her effort to fix the order of the letters in the child's memory and must endeavor to correct the defect in her teaching.

Review tests should be given from time to time — at the ends of weeks, months, semesters, years. The purpose of these reviews is to test the child's retentiveness, to recall the earlier impressions, to repair the gaps that time has created. These review tests should usually be

The Test
of Teach-
ing

The
Review
Test

in the nature of games, contests, stunts. This will prevent the work from becoming a bore. The children will work to win the game, but the spelling results will be just as valuable as if the spelling itself were the only goal.

Standard tests have been devised for the purpose of comparing the spelling of children in one school system with that of those in another system or to compare the children of one school building with children in the same grade of another building in the same school system. Standards have been worked out by Ayres, Buckingham, Ashbaugh, and others. The teacher should familiarize herself with these. She should test her own children according to the directions given on the test. This will help her to compare the situation in her school with the standard. From the results of these tests she can get some idea of the limitations of her pupils. When these are revealed, she should study the pedagogical literature dealing with spelling to find suggestions for correcting the limitations which the test has revealed.

4. *In our state each child above the third grade is required to have his own dictionary. The words for the spelling lesson are assigned and each child is expected to look up the words in the dictionary and write sentences showing their use. What do you think of the plan?*

Every child able to read it should have a dictionary. It should assist the pupil when he wishes to use words of which he is not sure of the meaning or spelling. For a very young child to get from the dictionary the correct meaning of a word is difficult. It is better for the teacher to explain the meaning, illustrate the use, and then ask the child to use it in sentences of his own. To require children to write dictionary definitions of words as a part of the spelling lesson is a questionable procedure.

Use of
the Dic-
tionary

The use of the dictionary should be carefully taught to the children so that they can consult it quickly when they have need. They should be encouraged to use it. It has an important place in helping to build up a spelling conscience and a spelling consciousness. The children should be led to regard the dictionary as a friend in times of need and not as an instrument of torture.

QUESTIONS AND EXERCISES

1. List the special difficulties which you personally have had in your efforts to become a good speller. What particular discussions in this book have applied to your own situation?
2. List the principal difficulties which you have encountered as a teacher of spelling. Which discussions have helped you most in their solution?
3. Are the particular questions discussed in this chapter the ones which you have most often asked?

What other questions do you think should have been included?

4. List the questions on spelling which are still unanswered for you. Look carefully through the book to see if you cannot find a satisfactory answer.

5. Do you wish to make a more extended study of some phase of the teaching of spelling? If so, we refer you to the material suggested in the bibliography. }¹₂

PART III

BIBLIOGRAPHY

1. Abbott, Edwina E. — *On the Analysis of the Memory Consciousness in Orthography*. Psychological Review Monograph Supplement, Vol. II, 127-158.
2. Anderson, W. N. — *The Determination of a Spelling Vocabulary Based upon Written Correspondence*. Ph.D. Thesis, University of Iowa, 1917.
3. Ashbaugh, E. J. — *A Spelling Scale of 3000 Common Words*. University of Iowa Extension Bulletin, No. 43, 1918.
4. Ayres, L. P. — *The Public Schools of Springfield, Illinois*, 71-74. Russell Sage Foundation, 1914.
5. Ayres, L. P. — *The Spelling Vocabularies of Personal and Business Letters*. Russell Sage Foundation.
6. Ayres, L. P. — *A Measuring Scale for Ability in Spelling*. Russell Sage Foundation, 1915.
7. Bagley, W. C. — *Classroom Management*. The Macmillan Company.
8. Bagley, W. C. — *The Educative Process*. The Macmillan Company.
9. Baur, Nicholas. — *Writing Vocabulary of Pupils in the New Orleans Public Schools*. Department of Superintendence, New Orleans, 1913.
10. Bobbitt, F. — *What the Schools Teach and Might Teach*. The Cleveland Survey, 1915.
11. Brandenburg, G. C. — *The Spelling Ability of University Students*. School and Society, VII, 26-29; 1918.
12. Buckingham, B. R. — *Buckingham's Extension of the Ayres Spelling Scale*. University of Illinois.
13. Buckingham, B. R. — *Spelling Ability; Its Measurement and Distribution*. Teachers College Contributions to Education, No. 59.

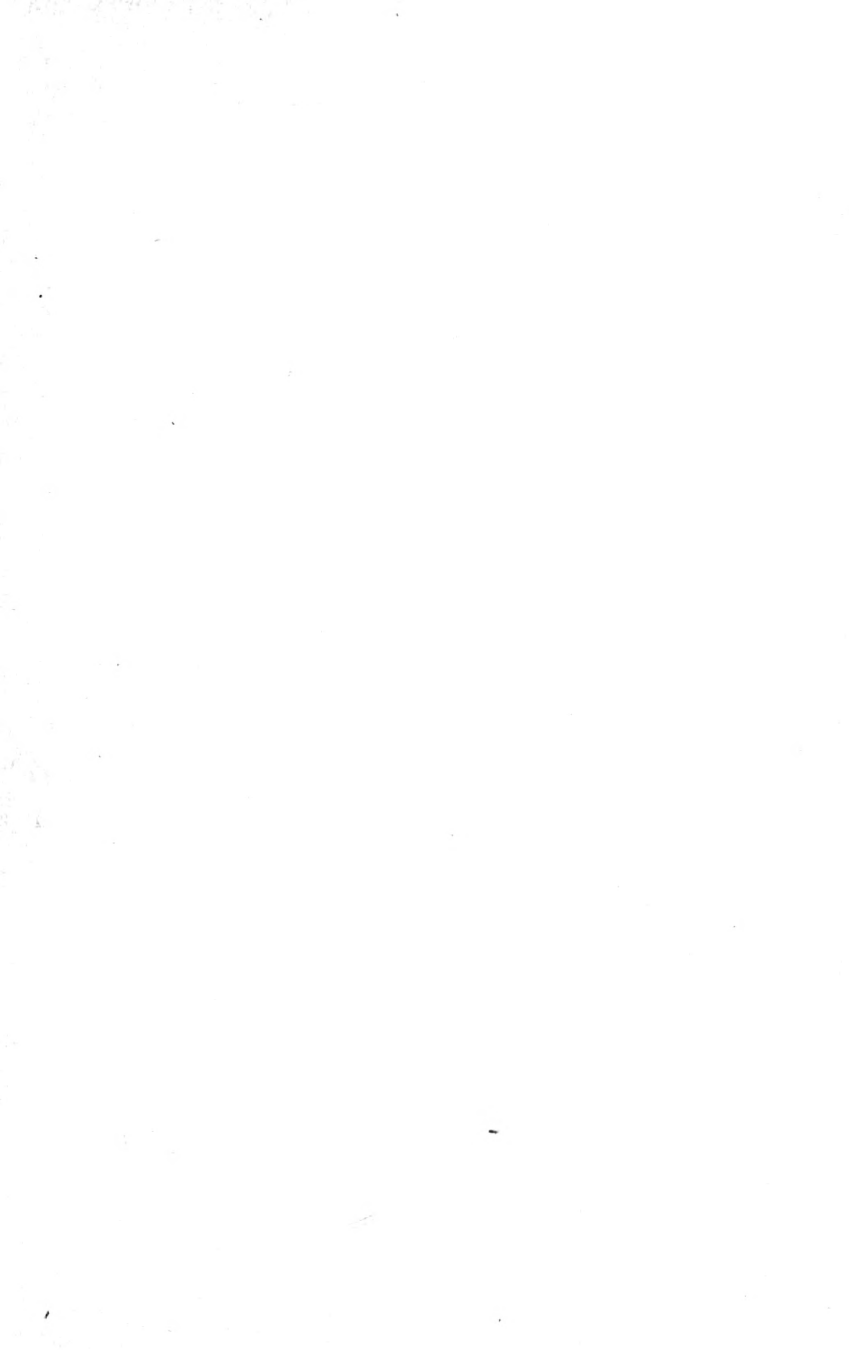
14. Burnham, W. H. — *The Hygiene and Psychology of Spelling*. Pedagogical Seminary, XIII, 408-501; 1906.
15. Charters, W. W. — *A Spelling Hospital in High School*. School Review, March, 1910.
16. Charters, W. W. — *Methods of Teaching*. Row, Peterson & Co.
17. Charters, W. W. — *Teaching the Common Branches*. Row, Peterson & Co.
18. Colvin, S. S. — *The Learning Process*. The Macmillan Company.
19. Cook, W. A., and O'Shea, M. V. — *The Child and His Spelling*. The Bobbs-Merrill Company.
20. Cook, W. A. — *Shall We Teach Spelling by Rule?* Journal of Educational Psychology, III, 316-325; 1912.
21. Cornman, O. P. — *Spelling in the Elementary Schools*. Psychological Clinic.
22. Courtis, S. A. — *Teaching Spelling by Plays and Games*. S. A. Courtis, Detroit, Michigan.
23. Eldridge, R. C. — *Six Thousand Common English Words*. R. C. Eldridge, Niagara Falls, New York.
24. Freeman, F. N. — *Psychology of the Common Branches*. Houghton Mifflin Company.
25. Foster, W. T. — *The Spelling of College Students*. Journal of Educational Psychology, II, 211-215; 1911.
26. Hawkins, C. J. — *Experiments on Memory Types*. Psychological Review, IV, 289-294; 1897.
27. Heilman, J. — *Effect of Syllabification on Learning to Spell*. Unpublished Study, Colorado State Teachers College.
28. Holmes, H. W. — *Time Distribution by Subjects and Grades in Representative Cities*. Fourteenth Yearbook of the National Society for the Study of Education, Part I, 21-28.
29. Horn, E. — *Principles of Methods in Spelling*. Eighteenth Yearbook of the National Society for the Study of Education, Part II, 52-77.
30. Johnstown, Pa., Public Schools. — *The Teaching of Spelling*, 1913.
31. Jones, W. F. — *Concrete Investigation of the Materials of English Spelling*. University of South Dakota, 1913.
32. Kendall, C. N., and Mirick, Geo. A. — *How to Teach the Fundamental Subjects*. Houghton Mifflin Company.
33. Kratz, H. E. — *Studies and Observations in the School Room*. Educational Publishing Company.

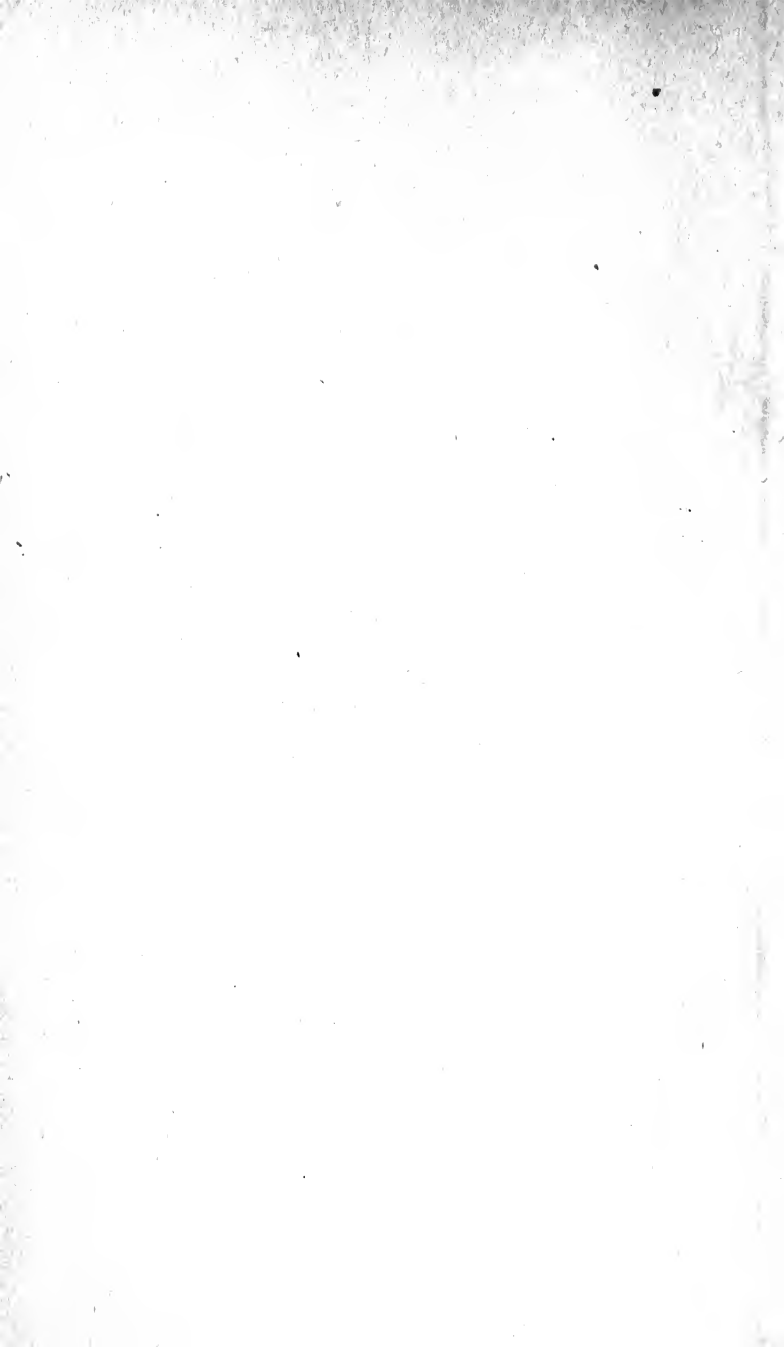
34. Lewis, E. E. — *Spelling List for Use in Normal Training High Schools*. Iowa State Department of Public Instruction.
35. Longenecker, Gertrude. — *The Teaching of Spelling*. State Normal School, San Diego, California.
36. Mead, Cyrus D. — *The Spelling Ability of Plumas County Children*. Supplement to California Blue Bulletin, December, 1919.
37. Matthews, Brander. — *The Spelling of Yesterday and of To-morrow*. Outlook, LXXXII, 848-853.
38. McMurry, F. M. — *How to Study*, 83-84. Houghton Mifflin Company.
39. New Jersey Department of Public Instruction. — *The Teaching of Spelling*.
40. Nicholson, Anne. — *A Speller for the Use of the Teachers of California*. California State Printing Office, Sacramento, 1914.
41. Owen Publishing Co. — *Methods, Aids, and Devices*, Vol. I.
42. Pearson, H. C. — *Experimental Studies in the Teaching of Spelling*. Teachers College Record, January, 1912.
43. Pearson, H. C. — *The Scientific Study of the Teaching of Spelling*. Journal of Educational Psychology, May, 1911.
44. Perry, A. C. — *Problems of the Elementary School*, 171-176. D. Appleton & Co.
45. Pryor, H. C. — *A Study in the Psychology and Pedagogy of Spelling*. Master's Thesis, University of Colorado, 1912.
46. Pryor, H. C. — *Spelling*. Fourteenth Yearbook of the National Society for the Study of Education, Part I, 78-89. 1915.
47. Pryor, H. C. — *A Suggested Minimal Spelling List*. Sixteenth Yearbook of the National Society for the Study of Education, Part I, 73-84; 1917.
48. Pyle, W. H. — *Outlines of Educational Psychology*. Warwick & York, Inc.
49. Rapeer, L. W. — *Teaching Elementary School Subjects*. Charles Scribner & Sons.
50. Rice, J. M. — *The Futility of the Spelling Grind*. Forum, 23; 163-172; 1897.
51. Riley, J. W. — *The Springfield Tests*. Holden Company, Springfield, Massachusetts.
52. Rowe, Stuart H. — *Habit Formation and the Science of Teaching*. Longmans, Green & Co.
53. Schwiering, O. C. — *A Study in Grouping by Similarity in Spelling*. Wyoming School Journal, May-June, 1917.

54. Sears, J. B. — *Spelling Efficiency in the Oakland, California, Schools*. Bureau of Information, Statistics, and Educational Research, 1915.
55. Shaw, Ester E. — *Is Spelling a Failure?* Educational Review, September, 1911.
56. Spindler, F. N. — *Memory Types in Spelling*. Education, XXVIII, 175-181.
57. Starch, D. — *Measurement of Efficiency in Spelling*. Journal of Educational Psychology, 167-186, March, 1915.
58. Starch, D. — *Educational Measurement*, Chapter VI. The Macmillan Company.
59. Straubenmuller, Gustave. — *Standards in Spelling*. Board of Education, New York City.
60. Studley, C. K. and Ware, Allison. — *Common Essentials in Spelling*. State Normal School, Chico, California.
61. Suzzallo, Henry. — *The Improvement of Instruction in Spelling*. Teachers College Record, January, 1912.
62. Suzzallo, Henry. — *The Teaching of Spelling*. Houghton Mifflin Company.
63. *Spelling in the Boston Public Schools*, McEvoy Magazine, 1915.
64. Stuart, A. T. — *Washington, D. C., List*. Board of Education Bulletin.
65. Taylor, W. T. — *The Color Element in Early Education*. Journal of Educational Psychology, XVII, 201-251.
66. Theisen, W. W. — *Studies in Educational Measurements in Wisconsin*, No. 1, 18-20; 1918.
67. Thorndike, E. L. — *Educational Psychology*. Teachers College, Columbia University.
68. Tidyman, W. F. — *The Teaching of Spelling*. World Book Company.
69. Wagner, C. A. — *An Experimental Study; Grouping by Similarity as a Factor in the Teaching of Spelling*. Ph. D. Thesis, University of Pennsylvania.
70. Wallin, J. E. W. — *Spelling Efficiency in Relation to Age, Grade, and Sex and the Question of Transfer*. Warwick & York, Inc.
71. Wheeler, Benjamin I. — *Orthography and Simplified Spelling*. Outlook, LXXXVI; 314-317.
72. Whipple, G. M. — *Relative Efficiency of Phonetic Alphabets*. Warwick & York, Inc.
73. Winch, W. H. — *Experimental Researches on Learning to Spell*.

Journal of Educational Psychology, IV, 1913; 524-537, 579-592.

74. Winch, W. H. — *Further Experimental Researches on Learning to Spell*. Journal of Educational Psychology, V, 449-460; 1914.
75. Winch, W. H. — *Additional Researches on Learning to Spell*. Journal of Educational Psychology, VII, 93-110; 1916.
76. Witmer, L. — *A Case of Chronic Bad Spelling*. Psychological Clinic, I, 53-64; 1907.
77. Wyckoff, Adelaide E. — *Constitutional Bad Spellers*. Pedagogical Seminary, II, 448-451; 1892.
78. Woolfolk, Algar. — *The Need of Intensive Work in Spelling*. Unpublished thesis, Teachers College, Columbia University.





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